Introductory Lecture
ON
MATERIA MEDICA.

Delivered in the University of Edinburgh,

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GENTLEMEN,—As we to-day commence a new session, which is contemporaneous with the introduction into our University of several important changes in medical education and graduation, it may be useful if I make some remarks on these changes, especially as this is the first opportunity that has presented itself for my doing so. Briefly stated, the most important changes introduced by the Medical Ordinance, which became law on the 5th of August of this year, are as follows:—1. Certain modifications in the preliminary examination in general education, tending generally to the simplification of this examination, but requiring that the entire examination shall be passed at one and the same time, before medical studies have been commenced. 2. Extension of the minimum course of study for the lower degrees to five years, with a few modifications in the educational and examination arrangements and requirements, the most important of the latter being the addition of mental diseases, ophthalmology, fevers and diseases of children to the curriculum. 3. The substitution of the title "Bachelor of Surgery" for "Master in Surgery," thereby rendering the two lower degrees similar in title; these becoming, therefore, Bachelor of Medicine (M.B.) and Bachelor of Surgery (Ch.B.), and being only conferable together and at the same time. 4. The increase in the educational requirements for the degree of Doctor of Medicine and the introduction of an examination for that degree in Clinical Medicine, including some of its special departments. 5. The creation of a higher degree in Surgery, with requirements similar to those for the higher degree in Medicine, to which the title "Master of Surgery (Ch.M.)" is to be applied. These changes, gentlemen, are not, however, likely to affect any of you. No doubt the new ordinance provides that every student who began his medical studies before the date when it came into operation shall be entitled to graduate under the system in force before or after that date, according as he shall comply with the regulations of the old or of the new ordinance. As nearly all of you have already entered upon at least your third year of study, it cannot be expected—and indeed the proceeding would be one of more than doubtful wisdom—that you would put yourselves in the position of beginners, and again undergo elementary studies and preliminary and first professional examinations. For you, therefore, the modifications in the curriculum, the institution of a new title for the lower surgical degree, the elevation of the requirements for the degree of Doctor of Medicine and the creation of a new higher surgical qualification are not matters of personal interest.

Indeed, the only provision contained in the new ordinance to which I need draw your attention, as being likely to concern any of you, is set forth as follows: "Subject to regulations to be made from time to time by the University Court, the University may also confer diplomas in special branches of medical and surgical practice on graduates of the University in medicine and surgery." It is undoubtedly the case that specialisation in medical and surgical practice has now become so frequent, and its advantages have been admitted so generally by the medical profession and by the public, that the time has come when the University should assume a definite position towards it. For by doing so it may succeed in limiting the assumption by unqualified persons of claims to special knowledge, in giving a just and adequate recognition to knowledge that has been actually acquired, and in advancing the study of special branches of medical and surgical practice, which require a more extended study than can be obtained in the curriculum for the several degrees in medicine and surgery. These objects might be gained in three ways: by instituting a degree for each special branch; by giving options, embracing the special branches, in the examination for degrees; or by conferring diplomas upon candidates who qualify themselves by definite courses of study, and who afterwards pass satisfactory examinations in the special branches. The first method is obviously objectionable, in so far as it would multiply degrees to an extent that would be detrimental to all degrees. The second method would fail in adequately recognising the special knowledge, and would introduce the anomaly of a degree qualifying for practice implying under one and the same title different acquirements in different holders of the degree. These objections do not apply to the third method, as it would not increase the number of degrees or necessitate the existence of degrees implying different acquirements on the part of different holders, while it would adequately recognise the special branch by a special certificate or diploma, for which the course of study could be pursued without interfering with, because subsequent to, the course for a degree. The medical faculty has already expressed the opinion that the following among other subjects might thus be recognised and fostered: ophthalmology, mental diseases, laryngology with aural and nasal surgery, medical jurisprudence, midwifery and gynæcology. Whatever special branch is adopted, the graduate would be required to devote some time, not less than one year, to such further special studies as would entitle him to a certificate in that branch. For the certificate in Ophthalmology, for example, his further studies would require to embrace optics, the anatomy, physiology and pathology of the visual apparatus and systematic and clinical study of eye diseases; for the diploma in Mental Disease, mental philosophy, the laws relating to mental diseases, and the systematic and clinical study of the subject; for the diploma in Medical Jurisprudence, criminal law, morbid anatomy (including practice in post-mortem examinations), toxicology and insanity. The possession of a certificate would, therefore, imply that knowledge had been acquired entitling the possessor to claim special qualifications for the practice of some selected branch of medicine or surgery. The training would become a means for fostering advanced studies in the University, and for forming, with the advanced studies already existing in connexion with theses and about to be instituted in connexion with the higher degrees in medicine and surgery, an Honours School in which higher studies, appropriate for an academic institution, would be conducted.

As I have referred to University Honours, I would express the opinion that it is not advisable to develop further the system of conferring honours on students for mere class or examination distinction, founded upon the work required for obtaining degrees. There is already a danger of diverting the student into too early specialisation, which, while it may lead to great devotion to several of the subjects required for these degrees, also leads to partial neglect of others; a danger which would become increased if special examinations beyond the standard of requirements for degrees were instituted. Such distinctions are not those which a University should place in the first rank. They are, after all, but little removed from schoolboy prizes or the ambitions of a cramming institution. The Honours School rather should be constituted by studies and work performed after the elementary training required for the lower degrees has been completed. Then only can higher studies and researches qualifying for honours worthy of a university be engaged in without interference with the acquirement of that fundamental knowledge which is absolutely necessary for every practitioner of medicine and surgery.

A scheme giving practical effect to this section of the ordinance will, I trust, by-and-bye be issued. It will then be open to every graduate in medicine who adopts some special branch of professional work to obtain a high university honour, combined with a guarantee of special qualification to engage in that work. To other provisions in the ordinance I shall afterwards refer; but before doing so I propose to make a few remarks on the subject we are about to commence the study of in this class-room.

Medicine, as a practical Art, may truly be said to consist of only two branches—the knowledge of Diseases and the knowledge of their Cure. This knowledge has a wide foundation. It rests on the sciences of botany, zoology, chemistry and physics; of anatomy and physiology, and of pathology, medical, surgical and obstetrical. Notwithstanding the elevation thus reached, if we regard it merely as a practical art, that art to which you intend to dedicate your lives, then I say that medicine consists of only two branches of learning, one devoted to the knowledge of diseases, the other to the knowledge of remedies. The former teaches how to recognise

diseases, to trace their causes and effects, to anticipate their results; the latter how to recognise and administer remedies, how to ascertain their actions, how to apply these actions to the cure of diseases. Accordingly, in ancient times, when medicine had not yet reached the dignity of a scientific profession, but was an art only, it actually did consist of nothing else than these two departments, called the "Practice of Physic" and the "Materia Medica." Anatomy was all but unknown; chemistry was unborn; physiology was confined to a few crude conjectures about living functions, none of them more resembling the doctrines of the present day than the notion of the Greeks, that the blood swayed backwards and forwards in the veins "like the tide of Eurypus between Attica and Eubœa"; pathology, like chemistry, had no existence even in name; and as for the sciences of zoology and botany, the little known of them was merely some elementary facts comprised in one department of materia medica—that of the natural history of medicinal substances.

The first of the now extant writers on diseases, and the first author on remedies, represented in their works the whole range of the medical knowledge of two thousand years ago; and for many years afterwards their successors did little else than reproduce and variously dress up the observations and doctrines of the famous physicians of Cos and Anazarba. By-and-bye the cultivators of materia medica freed themselves from the trammels of the Greek school. To this result much was contributed by the discoveries of the alchemists and their immediate successors. More attention came to be paid to the physiological action of remedies, to those actions which occur in a state of health as contrasted with a state of disease. At the same time advantage was taken of the advancements that were being made in natural science, especially in chemistry and botany, to improve the description and definition of the articles of the materia medica. The scope of the subject, however, was not altered or its boundaries narrowed. In this University the first professor of the subject, Dr. Alston, in his teaching between the years 1738 and 1760, methodically discussed the natural history of medicines, and their action in health and in disease, with the diseases in which they are used. His successors, Dr. John Hope, Dr. Francis Home, Dr. James Home, Dr. Andrew Duncan and Sir Robert Christison, assigned the same latitude to the subject as it had received under the first occupant of the chair, but also added to it diet in its applications to disease and the therapeutic effects of electricity, galvanism and mineral waters. Indeed, the only curtailment that occurred during these eleven decades of the existence of the chair was when Dr. Cullen, in the session 1761-2, delivered a course of lectures on materia medica, in the interval between the death of Dr. Alston and the assumption of duty by his successor, Dr. Hope. It is not without interest to note that Dr. Cullen almost entirely restricted his teaching to general and special therapeutics, and made only brief and meagre reference to the physical properties of remedies.

I need scarcely tell you, therefore, that from the earliest times Materia Medica has signified the knowledge of healing materials and remedies—the knowledge of all means and circumstances directly or indirectly useful towards the cure of diseases. In the words of my immediate predecessor, Sir Robert Christison, "a complete course of materia medica should treat of: (1) medicines, properly so-called; (2) imponderable remedies or qualities of matter, such as heat, cold, electricity and galvanism; (3) diet, or food and drink, as medicinal agents." Among these several departments the one which, from its special importance and great extent, must engross the largest share of attention is that of medicines properly so-called. Consideration must be given to their chemical, physical and botanical characters, as well as to their physiological properties and effects and uses in disease. While in former times the state of advancement of the various sciences upon which the description and appreciation of the characters and properties of medicines are dependent gave a prominence to the chemical, physical and botanical characters, the present state of science no longer renders it necessary to maintain this ascendency.

Pathology, after a long and no doubt unavoidably restricted attention to the gross lesions produced by disease, to the modifications of structure caused by abnormal action, or to what may be termed pathological anatomy, has now advanced far into the much more valuable investigation of the changes in normal action leading to or causing these gross changes or producing the conditions which constitute disease. Many important facts have been established in this branch of pathology, which is now recognised as pathological physiology. The symptoms of several diseases, for example, have been shown to depend on perverted actions of definite portions of the nervous system, on chemical changes in constituents of the body, or on the introduction of hurtful substances, which have themselves been isolated and identified. Physiology has in each of these, and in many other advancements of pathology, acted as an indispensable pioneer, establishing by investigation the normal action and the normal composition of the structures of the body. The problems placed before the physician in each case of disease to which he is required to apply remedies are now, therefore, in many instances more definite and even more simple than they formerly were. Intelligent limitations have taken the place of superstitious or uninformed exaggeration of the curative power of medicines; and it has become apparent that, in order to treat the abnormal conditions with success, knowledge must be possessed of not only the pathological conditions, but also of the exact changes in structure or in composition which the remedial substances are capable of producing. A relatively new department, that of pharmacology, has accordingly been added to materia medica. It constitutes the foundation of therapeutics, or the application of remedies to disease; and as this application constitutes our main work as physicians or practitioners of medicine, the department of pharmacognosy (which deals with the physical characters of remedies) and that of pharmacy (which deals with the forms in which they are administered) must in a sense occupy subordinate positions. Let me add, however, that this subordination is only a relative one. Having regard to the ultimate object of medical study, a knowledge of the physical, sensible and chemical properties of medicinal substances and of pharmacy is of great practical value. Without it much of the advantage to be gained from the study of pharmacology and therapeutics will be rendered unavailable and useless; for the actual administration of remedies is necessarily based on knowledge of the former as well as of the latter.

The subject of materia medica, in so far as it is limited to medicines ordinarily so-called, includes all of these departments; but while the study of the chemical and other physical characters of medicines and of pharmacy should be engaged in at an early part of the curriculum, the study of pharmacology and therapeutics is impossible until a knowledge of physiology and pathology has already been acquired. This subdivision of the subject into two great groups, the physical and the biological, and the placing of the instruction in the former at an earlier period than that of the latter, would prove of much advantage to the student. He would find it a more easy matter to acquire a knowledge of physical and chemical characteristics and of pharmaceutical processes soon after he had studied botany and chemistry, and while the facts he had acquired of these subjects were yet vividly present in his recollection, rather than many months after the examinations in botany and chemistry had been passed. He would also be in a position to derive more benefit from, and to pursue with greater interest, his studies in systematic and clinical surgery, as he would possess some real knowledge of the remedies constantly being brought under his notice, whose names even he might otherwise never before have heard. The advantages would prove equally great if the departments of pharmacology and therapeutics were placed in a later part of the curriculum. As I have already pointed out, the former is founded upon physiology and the latter upon pathology, and as the separation of their consideration is highly inexpedient—if, indeed, it be not impossible—they cannot intelligently be studied until both physiology and pathology have been mastered. At a later part of the curriculum, further, some knowledge would have been acquired of the diseases which are treated by medicinal substances, and accordingly there would be avoided the perplexities and embarrassments which, in the entire absence of this knowledge, constantly arise from unavoidable references to diseases.

I have referred to the inseparable union that exists between pharmacology and therapeutics, and perhaps some expansion of this statement may be required in addressing an audience for the most part composed of those who now, for the first time, are invited to consider the meaning of these terms. As the object of pharmacological study and investigation is to obtain such knowledge as will enable us, by means of the physiological (or pharmacological) action of remedies, to restore to a standard of normal health the deviations from that standard produced by disease or pathological processes, it would be

highly inconvenient, and would increase greatly the difficulties of accomplishing this object, if the study and teaching of the action of remedies were dissociated from their application. The inconveniences of this dissociation become at once apparent when we realise that it would compel us, as students of materia medica, to ignore such remedial effects as that of salicin in rheumatic fever, of arsenic in chorea, of chrysophanic acid in psoriasis, of ipecacuanha in dysentery, or of iodide of potassium in aneurysm; and to ignore also if not actually the doses of remedies, at any rate the variations in doses necessary to produce different effects in disease and necessary for different diseases. It is, however, impossible to effect this dissociation, for our knowledge of the action of remedies is not only derived from their effects in normal states of the body, but also from their effects in diseased or pathological states, or, in other words, from their therapeutic effects. No description, for example, would be complete of the action of acetanilide, exalgine, phenacetine or phenazone which omitted their analgesic or pain-subduing effects; but this is a purely therapeutic action, not due to any narcotic or anæsthetic pharmacological action, and pain is a manifestation of diseased or pathological processes. No description would be complete of the action of digitalis, squill or strophanthus from which the diuretic action of these substances was omitted; but this action is manifested only in disease, and its demonstration rests upon clinical experience alone. No description would be complete of the action of quinine which did not include its action in reducing abnormally high temperature; but this action is displayed only in fever, and as fever is a pathological condition, the antipyretic action of quinine is necessarily a therapeutical one. No description would be complete of the action of iron which did not include its effects on essential constituents of the blood; but as these effects are produced only in anæmia, and as anæmia is a pathological condition, this, the fundamental action of iron, becomes a therapeutical one.

Influenced by such considerations as I have now brought before you, the Faculty of Medicine and the University Court adopted the recommendations that an examination on pharmacy and on the chemical, botanical and physical characters of medicinal substances should be taken either along with the examination on the subjects of anatomy and physiology, or at any earlier period of examination subsequently to the first professional examination; and that the examination on pharmacology and therapeutics should be taken at the end of the fourth winter of the new five years' curriculum, and after the examination on anatomy, physiology and pathology had been passed. These recommendations are in harmony with the expressed opinions of my predecessor in this chair (Sir Robert Christison), of the General Medical Council, of the Scottish Universities' Commission of 1876, and of the great majority of the teachers of materia medica in Great Britain, and they are supported by the arrangements now existing in the schemes of examination of English universities and of the Conjoint Boards of the Royal Colleges of England and of Scotland. They have been represented to the present Scottish Universities Commission in the form of two proposals: (1) To allow an examination on pharmacy and on the botanical and physical properties of medicinal substances, to be taken as soon after the first professional examination as the candidate desires; and (2) so to arrange the examination in pharmacology and therapeutics as to ensure that the candidate has obtained a sufficient knowledge of physiology before he studies the modifications of physiological conditions produced by medicinal substances, and a sufficient knowledge of pathological processes before the means for restoring them to a normal condition by medicines is required to be considered.

Although the essential parts of these proposals were apparently received with approval by the Commission, for they were reproduced, with at least one bewildering exception, in the first issued medical ordinances, I regret to say that in the final ordinances the Commission has departed from this position, and has, instead, adopted an extraordinary, and in some respects an unintelligible one. The Commission has ordained that the most unnecessary burden should continue to be imposed upon candidates of either maintaining at an examination standard—for two years after the examinations in chemistry and botany have been passed and when studies of totally different kind are occupying his attention—a knowledge of such of the details of these sciences as is required for even the most elementary study of pharmacy and of the distinguishing physical characters of medicinal substances, or of again laboriously acquiring this knowledge. The Commission has also ordained that candidates shall not be examined in pathology until after they have passed an examination on the therapeutic applications of medicines, which implies that in the opinion of the Commission the modifications of function or of composition by which abnormal or diseased processes and conditions are to be restored to a normal condition by medicinal agencies are to be studied before any knowledge has been obtained of the abnormal or pathological processes themselves.

In order, apparently, that there should be no ambiguity in regard to this extraordinary conception of the relationship between therapeutics and pathology, a most significant word has been introduced into the new ordinance. In the previous ordinance, that under which your studies are being conducted, our subject is termed "materia medica" only. Lest any doubt, however, should exist that materia medica includes therapeutics—although, as I have explained, the history and the very nature of the subject leave no room for doubt—the Commission in the new ordinance has actually changed the designation to that of materia medica and therapeutics. There will, therefore, be no escape from the irrational position of the candidate being examined on the treatment of disease by medicinal agents before knowledge has been acquired of the diseases to be treated, and consequently of the teaching and study of this treatment preceding the possession of this knowledge. This dilemma will occur not only with medicines proper, but also with such therapeutic agencies as electricity, galvanism, foods, mineral waters and climate, for they obviously can be considered here only as means for treating disease. In former years not only did the simultaneous study of pathology and materia medica and the earlier acquaintance with disease, necessitated by a four years' curriculum, greatly lessen the dilemma with regard to medicines proper, but it was largely avoided in the case of the above therapeutic agencies, by postponing their consideration to as late a period of the session as possible, when considerable progress had already been made by the student in his pathological studies. In the future this will be impossible, and the acquirement of knowledge of the therapeutic uses of remedies will then become a mere unintelligent exercise of memory.

You are, gentlemen, to be congratulated that, in so far as your studies in this room are concerned, the new ordinance of the Commission does not apply to you. While I, for my part, look forward with some anxiety to the time when it may be necessary for me thus "to make bricks without straw," I do not forget that any scheme involving new conditions is produced under difficulties, that the statement of defects, even when uncompromising, is often the surest means for effecting their removal, and that the interests of science and of education are those which will ultimately prevail in our University.

Lectures
ON THE
PHYSIOLOGY AND PATHOLOGY OF BLOOD DESTRUCTION.

Delivered in the Examination Hall, Victoria Embankment, on Nov. 22nd, 1892,

BY WILLIAM HUNTER, M.D. EDIN., M.R.C.P. LOND. &c.,

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LECTURE I. — INTRODUCTION.

GENTLEMEN,—The subject to which I propose to direct your attention in this lecture is a comparatively new one. Blood destruction *(hæmolysis)* has hitherto received too little attention at the hands of both physiologists and pathologists. In this respect the physiologists have been most in fault. Blood formation *(hæmogenesis)* appears to have monopolised their attention to the almost entire exclusion of the process which the necessity for a renewed formation of blood implies—namely, a previous destruction of blood; so much so that

diseases, to trace their causes and effects, to anticipate their results; the latter how to recognise and administer remedies, how to ascertain their actions, how to apply these actions to the cure of diseases. Accordingly, in ancient times, when medicine had not yet reached the dignity of a scientific profession, but was an art only, it actually did consist of nothing else than these two departments, called the "Practice of Physic" and the "Materia Medica." Anatomy was all but unknown; chemistry was unborn; physiology was confined to a few crude conjectures about living functions, none of them more resembling the doctrines of the present day than the notion of the Greeks, that the blood swayed backwards and forwards in the veins "like the tide of Eurypus between Attica and Eubœa"; pathology, like chemistry, had no existence even in name; and as for the sciences of zoology and botany, the little known of them was merely some elementary facts comprised in one department of materia medica—that of the natural history of medicinal substances.

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The subject of materia medica, in so far as it is limited to medicines ordinarily so-called, includes all of these departments; but while the study of the chemical and other physical characters of medicines and of pharmacy should be engaged in at an early part of the curriculum, the study of pharmacology and therapeutics is impossible until a knowledge of physiology and pathology has already been acquired. This subdivision of the subject into two great groups, the physical and the biological, and the placing of the instruction in the former at an earlier period than that of the latter, would prove of much advantage to the student. He would find it a more easy matter to acquire a knowledge of physical and chemical characteristics and of pharmaceutical processes soon after he had studied botany and chemistry, and while the facts he had acquired of these subjects were yet vividly present in his recollection, rather than many months after the examinations in botany and chemistry had been passed. He would also be in a position to derive more benefit from, and to pursue with greater interest, his studies in systematic and clinical surgery, as he would possess some real knowledge of the remedies constantly being brought under his notice, whose names even he might otherwise never before have heard. The advantages would prove equally great if the departments of pharmacology and therapeutics were placed in a later part of the curriculum. As I have already pointed out, the former is founded upon physiology and the latter upon pathology, and as the separation of their consideration is highly inexpedient—if, indeed, it be not impossible—they cannot intelligently be studied until both physiology and pathology have been mastered. At a later part of the curriculum, further, some knowledge would have been acquired of the diseases which are treated by medicinal substances, and accordingly there would be avoided the perplexities and embarrassments which, in the entire absence of this knowledge, constantly arise from unavoidable references to diseases.

I have referred to the inseparable union that exists between pharmacology and therapeutics, and perhaps some expansion of this statement may be required in addressing an audience for the most part composed of those who now, for the first time, are invited to consider the meaning of these terms. As the object of pharmacological study and investigation is to obtain such knowledge as will enable us, by means of the physiological (or pharmacological) action of remedies, to restore to a standard of normal health the deviations from that standard produced by disease or pathological processes, it would be

highly inconvenient, and would increase greatly the difficulties of accomplishing this object, if the study and teaching of the action of remedies were dissociated from their application. The inconveniences of this dissociation become at once apparent when we realise that it would compel us, as students of materia medica, to ignore such remedial effects as that of salicin in rheumatic fever, of arsenic in chorea, of chrysophanic acid in psoriasis, of ipecacuanha in dysentery, or of iodide of potassium in aneurysm; and to ignore also if not actually the doses of remedies, at any rate the variations in doses necessary to produce different effects in disease and necessary for different diseases. It is, however, impossible to effect this dissociation, for our knowledge of the action of remedies is not only derived from their effects in normal states of the body, but also from their effects in diseased or pathological states, or, in other words, from their therapeutic effects. No description, for example, would be complete of the action of acetanilide, exalgine, phenacetine or phenazone which omitted their analgesic or pain-subduing effects; but this is a purely therapeutic action, not due to any narcotic or anæsthetic pharmacological action, and pain is a manifestation of diseased or pathological processes. No description would be complete of the action of digitalis, squill or strophanthus from which the diuretic action of these substances was omitted; but this action is manifested only in disease, and its demonstration rests upon clinical experience alone. No description would be complete of the action of quinine which did not include its action in reducing abnormally high temperature; but this action is displayed only in fever, and as fever is a pathological condition, the antipyretic action of quinine is necessarily a therapeutical one. No description would be complete of the action of iron which did not include its effects on essential constituents of the blood; but as these effects are produced only in anæmia, and as anæmia is a pathological condition, this, the fundamental action of iron, becomes a therapeutical one.

Influenced by such considerations as I have now brought before you, the Faculty of Medicine and the University Court adopted the recommendations that an examination on pharmacy and on the chemical, botanical and physical characters of medicinal substances should be taken either along with the examination on the subjects of anatomy and physiology, or at any earlier period of examination subsequently to the first professional examination; and that the examination on pharmacology and therapeutics should be taken at the end of the fourth winter of the new five years' curriculum, and after the examination on anatomy, physiology and pathology had been passed. These recommendations are in harmony with the expressed opinions of my predecessor in this chair (Sir Robert Christison), of the General Medical Council, of the Scottish Universities' Commission of 1876, and of the great majority of the teachers of materia medica in Great Britain, and they are supported by the arrangements now existing in the schemes of examination of English universities and of the Conjoint Boards of the Royal Colleges of England and of Scotland. They have been represented to the present Scottish Universities Commission in the form of two proposals: (1) To allow an examination on pharmacy and on the botanical and physical properties of medicinal substances, to be taken as soon after the first professional examination as the candidate desires; and (2) so to arrange the examination in pharmacology and therapeutics as to ensure that the candidate has obtained a sufficient knowledge of physiology before he studies the modifications of physiological conditions produced by medicinal substances, and a sufficient knowledge of pathological processes before the means for restoring them to a normal condition by medicines is required to be considered.

Although the essential parts of these proposals were apparently received with approval by the Commission, for they were reproduced, with at least one bewildering exception, in the first issued medical ordinances, I regret to say that in the final ordinances the Commission has departed from this position, and has, instead, adopted an extraordinary, and in some respects an unintelligible one. The Commission has ordained that the most unnecessary burden should continue to be imposed upon candidates of either maintaining at an examination standard—for two years after the examinations in chemistry and botany have been passed and when studies of totally different kind are occupying his attention—a knowledge of such of the details of these sciences as is required for even the most elementary study of pharmacy and of the distinguishing physical characters of medicinal substances, or of again laboriously acquiring this knowledge. The Commission has also ordained that candidates shall not be examined in pathology until after they have passed an examination on the therapeutic applications of medicines, which implies that in the opinion of the Commission the modifications of function or of composition by which abnormal or diseased processes and conditions are to be restored to a normal condition by medicinal agencies are to be studied before any knowledge has been obtained of the abnormal or pathological processes themselves.

In order, apparently, that there should be no ambiguity in regard to this extraordinary conception of the relationship between therapeutics and pathology, a most significant word has been introduced into the new ordinance. In the previous ordinance, that under which your studies are being conducted, our subject is termed "materia medica" only. Lest any doubt, however, should exist that materia medica includes therapeutics—although, as I have explained, the history and the very nature of the subject leave no room for doubt—the Commission in the new ordinance has actually changed the designation to that of materia medica and therapeutics. There will, therefore, be no escape from the irrational position of the candidate being examined on the treatment of disease by medicinal agents before knowledge has been acquired of the diseases to be treated, and consequently of the teaching and study of this treatment preceding the possession of this knowledge. This dilemma will occur not only with medicines proper, but also with such therapeutic agencies as electricity, galvanism, foods, mineral waters and climate, for they obviously can be considered here only as means for treating disease. In former years not only did the simultaneous study of pathology and materia medica and the earlier acquaintance with disease, necessitated by a four years' curriculum, greatly lessen the dilemma with regard to medicines proper, but it was largely avoided in the case of the above therapeutic agencies, by postponing their consideration to as late a period of the session as possible, when considerable progress had already been made by the student in his pathological studies. In the future this will be impossible, and the acquirement of knowledge of the therapeutic uses of remedies will then become a mere unintelligent exercise of memory.

You are, gentlemen, to be congratulated that, in so far as your studies in this room are concerned, the new ordinance of the Commission does not apply to you. While I, for my part, look forward with some anxiety to the time when it may be necessary for me thus "to make bricks without straw," I do not forget that any scheme involving new conditions is produced under difficulties, that the statement of defects, even when uncompromising, is often the surest means for effecting their removal, and that the interests of science and of education are those which will ultimately prevail in our University.

Lectures
ON THE
PHYSIOLOGY AND PATHOLOGY OF BLOOD DESTRUCTION.

Delivered in the Examination Hall, Victoria Embankment, on Nov. 22nd, 1892,

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LECTURE I.—INTRODUCTION.

GENTLEMEN,—The subject to which I propose to direct your attention in this lecture is a comparatively new one. Blood destruction *(hæmolysis)* has hitherto received too little attention at the hands of both physiologists and pathologists. In this respect the physiologists have been most in fault. Blood formation *(hæmogenesis)* appears to have monopolised their attention to the almost entire exclusion of the process which the necessity for a renewed formation of blood implies—namely, a previous destruction of blood; so much so that

while the literature on the former is voluminous (the organs concerned in this process have even been dignified with a special name, "hæmopoietic") the references to the latter as a normal physiological process are of the scantiest. I am not, indeed, aware of a single paper dealing in any systematic way with the latter. This circumstance renders somewhat more difficult my present task, which is to embody within the compass of this lecture the results of investigations relative to it, which I have now carried on for several years. In the Arris and Gale Lectures before the Royal College of Surgeons in 1889, and in an investigation into the "Pathology of Pernicious Anæmia," published by me in 1888, I had occasion to touch briefly on the subject. I was unable, however, at that time to give it the full consideration I deemed commensurate with its importance. This blank I now propose to fill up so far as I can; and although I am only too well aware how many points have still been left untouched by my observations, I hope that the present contribution to it may serve at least to point out in what directions information is still required; while at the same time it may afford a fresh point of departure for future workers.

DEFINITION OF BLOOD DESTRUCTION.

I have spoken of blood destruction as a definite process carried on in health, presumably by certain agencies, in certain situations and under certain conditions, just as blood formation is. That the blood is subject to changes both in its corpuscles and its plasma, necessitating from time to time their renewal, we have every reason, from analogy with the case of other tissues, to believe; and the first question which may naturally arise in your mind is, Why dignify by a special name a process in the blood which in the case of other tissues we are content to let pass without special notice? We do not feel called on to speak of a muscle destruction or a glandular destruction to describe the retrogressive changes which necessarily accompany the activity of these tissues. Why, then, speak of a blood destruction? In answer to this question I ask in return, Why speak of blood formation any more than we speak of a muscle or a gland formation? The reason in both cases is, I think, obvious—namely, first, that the mystery which still shrouds the origin and fate of the blood of itself naturally excites interest and inquiry; and, secondly, the activity of the other tissues is so bound up with the condition of the blood that it is a matter of paramount importance alike to physiologist and pathologist to learn everything they can regarding its life history, its mode of origin, the changes that occur in it and even its manner of death. The slightest deviation from the normal at any period of its life history may carry with it results out of all proportion to the apparent magnitude of the change itself. It will be one of the objects of this lecture to show how true this statement is as regards those series of changes by which the blood in health is affected more or less injuriously, and how an increase in these changes may be, and in certain cases are, responsible for some of the most severe forms of anæmia and blood disease.

EVIDENCES OF BLOOD DESTRUCTION DERIVED FROM A STUDY OF PIGMENTS.

Premissing that such will be the result of our inquiry, I now ask your attention to the evidence we possess that a destruction of blood is a normal physiological occurrence. The evidence we possess on this point is unfortunately scanty and vague. It necessarily varies according as it is the plasma or the corpuscles that we have special regard to. Here let me say at once that when I speak of the blood I mean not simply an albuminous fluid in which are suspended certain corpuscles, but of a highly organised tissue—a tissue to which I would assuredly and without hesitation apply the term "living" did I not fear to be asked to define what life is. This view of the blood as a tissue is no mere opinion to be accepted or rejected according to the individual standpoint from which its study is approached. It is in my view a cardinal point in the consideration of the physiology and pathology of the blood. The relation of the various parts of the blood—plasma, white corpuscles and red corpuscles—to each other and to certain cells from which they derive their origin are, if anatomically less close, nevertheless physiologically no less intimate than that of the cells and matrix of any other tissue. On this point I would fain, did time permit, dwell. It must suffice now to state that the highly organised nature of the blood of which I speak is evident, in my opinion, not only in the white corpuscles, but in an equal, if not even greater, degree in the plasma and in the red corpuscles. They are mutually dependent upon each other. No change occurs in the one without being attended by change of some kind in the other. No study of the behaviour of the blood under different circumstances can therefore be complete which does not have regard to this important mutual interdependence of its various elements. These remarks in the nature of a digression are necessary. If in the course of this study I appear to dwell too exclusively on the behaviour of one element of the blood to the apparent neglect of others, I should like you to understand that I do so for some particular reason. If, for example, as will be the case, I speak more of the red corpuscles than of the white, it will not be that I consider the changes in them to be more important than those in the white, but solely that the changes in the blood of which I speak are more easily studied in their case than in the case of the white corpuscles or of the plasma. If I speak much of pigment as an evidence of blood destruction, and study minutely its characters, distribution, mode of formation and ultimate fate, it is not on account of the importance of pigment as such, or of the lesser importance of other products, derived, let us say, from the breaking up of the white corpuscles. On the contrary, most of the changes I describe I shall have to refer back to the action of the white corpuscles or their congeners. My sole reason for dwelling so much on the red corpuscles will be that the points I desired to elucidate I found could best be elucidated by a study of the changes observed in them and in their chief constituent—hæmoglobin.

As I have stated, the evidences of the existence of any special process of hæmolysis in health naturally differs according as we have regard to the plasma, the white corpuscles or the red. In the case of the plasma and the white corpuscles such evidence as we possess, although not unimportant, is comparatively slight. I shall consider it later on, and for the reasons just stated I pass at once to the red corpuscles. Their chief constituent—hæmoglobin—is not disposed of in the same easy way, leaving little or no trace behind, as are the albuminous constituents of the plasma or the white corpuscles. Very early in the scale of animal organisation there appears an organ—the liver—one of whose functions it is to excrete from the body various pigment derivatives of effete hæmoglobin. Important evidence as to the occurrence of a destruction of blood as a normal process is derived from a study of these pigments, either excreted in the form of biliary and urinary pigments or stored up as blood pigment.

A. BILE PIGMENT.

As regards the bile pigments the evidence is of two kinds—that pointing to hæmoglobin as their source and that pointing to the liver as the seat of their formation. It will, I think, conduce to clearness if, avoiding detail, I state concisely what the purport of that evidence is. With reference, then, to the derivation of the bile pigments from hæmoglobin, there is, in the first place, the fact, now fully established in my opinion (Virchow, Jaffé, Langhans, Hoppe-Seyler, Cordua and Quincke), that the crystalline pigment—hæmatoidin—so frequently found in old blood extravasations is chemically identical with bilirubin, the chief pigment of the bile; and, secondly, the further fact that some of the pigments which give rise to the characteristic discolourations of bruises are indistinguishable in character and reactions from bilirubin and biliverdin (Langhans, Cordua and Quincke). 1. Under certain conditions therefore, such as those above referred to, the hæmoglobin of the blood undergoes changes leading to the formation of pigments closely resembling, if not identical with, the chief pigments of the bile.

The genetic relationship between hæmoglobin and the bile pigments becomes still more clear when we consider the close connexion now proved to exist (Hermann, Nothnagel, Kühne, Tarchanoff, Stadelmann and Afanassiew) between an increased destruction of hæmoglobin on the one hand and an increased formation of bile pigments on the other. The facts observed in this connexion are of this kind: that when hæmoglobin is injected into or set free in the blood, it is followed by an increased excretion of bile pigments. So immediate and close is this relation that an attempt has even been made (Stadelmann)—hitherto, it is true, with but partial success—to prove that it is quantitative as well as qualitative; that the increase in the excretion of bile pigments is proportional to the quantity of hæmoglobin set free. 2. Hæmoglobin is thus an important source of the bile pigments daily excreted in health.

To what extent this is evidence of a daily hæmolysis we shall afterwards consider.

B. BLOOD PIGMENT.

The bile pigments are by no means the only pigment derivatives of hæmoglobin. In addition to the various pigments and chromogens of the urine, some of which are without doubt derived from the bile pigments, while others may, as I think, derive their origin more directly from hæmoglobin, there is another variety whose origin from the blood is so obvious that it has received the name, *par excellence*, of blood pigment. This is the pigment so frequently met with around old extravasations, and as such its characters and the appearance it presents have long been familiar to everyone. It differs from the pigments we have hitherto been considering in two respects—first, that it is usually found in an amorphous or granular form; and secondly, that it retains all the iron of the original hæmoglobin molecule.

The first circumstance enables it to be recognised by means of the microscope, while the second also conduces to its easy recognition and detection, since by suitable micro-chemical methods the iron it contains can be made to give characteristic colour reactions. For the iron present is not organically bound up, as it is in the original hæmoglobin (in which case it is unaffected by such micro-chemical reagents), but it is free, in the form either of its ferrous or ferric salts, or of both, and most probably as an albuminate. In this form it gives all the reactions of free iron, is blackened by sulphide of ammonium, gives the Prussian-blue reaction with ferrocyanide of potassium and dilute hydrochloric acid &c. You will, I trust, have occasion presently to appreciate how greatly the use of such micro-chemical methods facilitates the detection of pigment where otherwise its presence might have escaped notice. Although, as I have stated, the origin of such blood pigment from hæmoglobin is so obvious as to be beyond all dispute, I would not have you believe that the interest connected with it or its genesis is thereby exhausted. On the contrary, around the apparently simple question of the mode of origin of blood pigment from hæmoglobin there raged nearly half a century ago a sharp controversy, taken part in by three of the most distinguished pathologists of the century—i.e., Henle, Virchow and Kölliker. It is not my intention here or now to rake up the ashes of past controversial fires; but in the discharge of my task I cannot but refer to certain points still in dispute regarding this subject of the formation of blood pigment. The consideration of these points I shall take up as they arise in the course of the present study.

Scope of the Investigation.—Blood pigment wherever found denotes a death of red corpuscles. The first point in estimating its significance is to ascertain in what situations it is normally to be found, under what conditions, and, so far as is possible, in what amount. Considering in how many situations, and apparently under what diverse conditions, blood pigment may be found such an inquiry may seem a very wide one. In reality, however, when we eliminate all those conditions in which the pigment is obviously derived from extravasated blood, we find that the scope of the inquiry is not so extensive as it at first sight appears. Extensive it no doubt still is; for any conclusion as to its significance, apart from extravasation, must be based upon a comparative study carried out on a large number of animals belonging to widely different classes. At least, so it appeared to me. My observations have therefore been made on animals representative of the different groups of the vertebrata—on rabbits and guinea-pigs, on dogs and cats, on ducks and pigeons, and on frogs, as representing the classes of herbivora, carnivora, birds and cold-blooded animals respectively. It is in my judgment well that the basis of observation was in this way extended; for I found that conclusions drawn from a study of the mammalia alone had to be materially modified in the light of later observations made on birds and amphibians. In no single instance, however, was the information thus gained more definite in its character, or wider in its extent, than was afforded me by a somewhat minute study of the character and distribution of the pigment found in man under different conditions of health and disease. To the results of these observations I will now direct your attention, illustrating the different points by means of photographs and sections thrown on the screen.

Pigment derived from Extravasated Blood.—I show you, first of all, sections from three organs—gland, liver and spleen. In each of them, as you will see, there is pigment present; the gland, indeed, is almost packed full with it, the Prussian-blue reaction being extremely well developed. In the other two the pigment is much less abundant, but I ask your attention to its situation. The liver is markedly cirrhosed, and you see here and there, amidst the thick bands of fibrous tissue, narrow lines of pigment. Its distribution is quite irregular; it has, in particular, no relation to the liver cells. The lines correspond to lymphatics amidst the fibrous tissue. The spleen also shows thickening of its trabeculæ and increase of fibrous tissue, especially around some of its larger vessels. Here and there amidst this fibrous tissue you will likewise see small clumps of pigment in form of lines corresponding, as in the former case, to the seat of lymphatics. Lastly, I show you a section of a liver chronically congested (nutmeg liver). In the central zone of the lobule the liver cells are seen to be more or less atrophied and to contain yellow particles of pigment. Unlike, however, the pigment just described, these particles give no Prussian-blue reaction when tested. If they contain iron at all it is not in free form, but is still to some extent bound up. In all these cases the pigment has been derived from extravasated blood. In the case of the gland this is obvious; in the case of the liver and spleen it is no less obvious, and what I ask you to note is that in both cases the pigment is not in relation to the active cells of the organ—the liver cells and the splenic pulp respectively,—but lies amidst fibrous tissue. In the nutmeg liver in which the pigment is in relation to the liver cells I ask you to note, first, that it is the cells of the central zone that contain the pigment, and, secondly, that this pigment does not give the characteristic reactions of free iron. My object in showing you these sections is by way of clearing the ground. In the course of this study I shall have much to say regarding the presence of pigment in the liver and spleen and the significance to be attached to it. I wish you to understand, then, at the outset that in all my further remarks it is not the pigment of extravasation or chronic congestion that I refer to, but to pigment arising independently altogether of either of these conditions, and distinguishable from the latter either by its situation or its character, or by both.

Situations in which Blood Pigment is found.—The three organs in which, according to my observations, blood pigment is to be found, independently of extravasation or congestion, are the liver, spleen and red bone marrow; occasionally also the kidney.

LIVER.

Within the liver blood pigment is found in two situations—namely, the capillaries and the liver cells. Since both its character and the conditions under which it is met with differ in the two cases, it is necessary to consider these two situations separately.

A. Birds: Within the Capillaries.—I show you first of all sections of liver from the healthy pigeon. You will note that here and there, distributed apparently quite irregularly throughout the liver tissue, are masses of pigment, some of them of considerable size, all of them giving the characteristic reactions of free iron. The relation of this pigment to the capillaries or cells of the liver cannot in the case of the larger groups be easily made out, since they are frequently surrounded by groups of proliferating connective-tissue cells. The dark golden-brown granules and globules of which these conglomerate masses are made up appear, indeed, at first sight to have no definite relation either to the lobules, to the liver cells or to the capillaries of the liver. In their appearance they call to mind at once the large conglomerate heaps of pigment found so numerously in the livers of frogs—a section of which I now show you by way of contrast. In respect, indeed, of their irregularity in form, size and distribution, these masses might at first glance readily be taken for pigment formed from small local extravasations of blood, the resemblance to such being increased by the small-celled growth amidst which they lie. More careful examination, however, with a view to ascertaining their precise source, reveals that while the smaller heaps lie irregularly within the lobule amidst the liver cells, the larger ones lie in relation to the portal vessels, the small-cell growth amidst which they lie being derived from a proliferation of the connective-tissue cells of the sheath of these vessels. Further, even where no pigment heaps are to be found, you will note that throughout the capillaries of the liver particles of pigment in all respects similar to the individual particles of the larger groups are to be seen lying enclosed within cells of leucocyte nature. The shape of these particles is characteristic. The larger of them are

oval, resembling both in size and shape the original red corpuscles, from which without doubt they take their origin. The long diameter of some of these particles is greater than the breadth of the capillary in which they lie; and here and there at the bifurcation of a capillary such a particle has become arrested. Other particles carried up by cells become arrested behind the point of obstruction; and so by arrest of more and more particles, the larger conglomerate heaps are formed. This accounts for the irregularity in the distribution of these masses, their exact site being determined solely, and so to speak accidentally, by the arrest of the first pigment particle.

Such, then, according to my observations, is the mode of origin of the large heaps of pigment found in the liver of birds in health. The volume and shape of the red corpuscle when converted into pigment determine thus to some extent, according to the above view, the arrest of the particles in the capillaries of the liver. The frequency with which similar accumulations of pigment are found in the liver of animals possessing larger corpuscles than birds should therefore be *a fortiori* greater; and such is the case. Nowhere are such masses of pigment more common than in the liver of frogs. The red corpuscle of the frog has a volume, according to Kölliker, of 9·2 as compared with 1·7 in the pigeon.[1]

In mammals the average diameter is from 0·007 to 0·008 mm. In birds it varies from 0·015 to 0·018 mm., the transverse diameter being a little less than the mean longitudinal diameter, while in batrachians their long diameter varies from 0·015 to 0·058 mm. With such large corpuscles and correspondingly large particles of pigment it is not surprising that, as is the case, the liver of birds and frogs is so constantly the seat of large accumulations of pigment.

In Mammals.—In mammals the presence of pigment in this situation is altogether of less frequent occurrence. In young mammals it is, according to my experience, the exception to find it even in the smallest amount. This statement applies more particularly to the rabbit, dog and cat, and also to man. Even when present it is never in such amount as I have shown you in the pigeon; nor does it ever lead to the formation of similar heaps of pigment. In the section I now show you, from the liver of an aged dog, you will see a few pigment particles here and there distributed within the capillaries. The pigment is not free, but lies within leucocytes, occasionally also a few particles being seen within the endothelial cells lining the capillaries. The size of the granules varies much, the largest of them approaching that of a red corpuscle. In many cases part of the pigment appears to be diffused throughout the protoplasm of the cell. As I have stated, pigment in this situation is not unfrequently absent altogether. The younger the animal the less likely is any to be found, and conversely, the older the animal the more abundant is it likely to be. According to my observations age is the factor most important in determining both the presence and the amount of pigment to be found in the liver capillaries of mammals. A gradual increase in its amount does not therefore necessarily imply disease. When met with in old animals it may have a purely physiological significance, one altogether different from that usually ascribed to it. According to Quincke, an increase in the amount of pigment in the capillaries of the liver is an indication of an increased destruction of red corpuscles. I will presently show you that, on the contrary, such an increase, when associated with old age, as it so frequently is, is a sign of lessened destruction. I would not have you suppose, however, that pigment in this situation has always such a purely physiological significance. It may also under certain circumstances have an undoubted pathological significance, pointing to an increased destruction of blood. The diseases in which I find this most strikingly and typically exemplified are pernicious anæmia and malaria. It was a study of the former disease that first led me to investigate the whole subject of blood destruction. You will note from the sections now shown how exceedingly abundant the blood pigment is and how striking the iron reaction can be developed in it. By far the greater part of it lies within the liver cells; but what I wish you now to note is that some of it also lies enclosed in leucocytes within the capillaries. The proportion of pigment in liver cells and capillaries respectively varies very much, I find, in different cases. In some little or none is to be found in the capillaries, notwithstanding that it is abundant in the liver cells. In others, again, it is abundant in both situations; while, lastly, in a third group, of which my cases furnish me with one example, characteristic pigment granules are present in the capillaries, while the liver cells are almost free. In all cases the pigment lies within cells either leucocytes or cells of kindred nature; occasionally also particles may be found within the endothelial cells lining the capillaries.

Turning now from such changes induced by disease, I show you sections from the liver of rabbits and pigeons, in which a large increase of pigment within the capillaries has been induced experimentally by the injection of toluylendiamine into the circulation. In the case of the pigeon (Experiment 72) you will observe a notable increase in the pigment cells within the capillaries. In the case of the rabbit (Experiment 89) a similar increase is seen, most marked in the capillaries at the periphery of the lobule. The conclusions, then, I would have you carry with you from this portion of our study are as follows:—1. One of the situations in which blood pigment may normally (i.e., apart from extravasation or congestion) be found is the capillaries of the liver. 2. The amount present varies much in different animals and under different conditions. While in birds and animals lower in the vertebrate scale its presence, sometimes in large amount, is the rule, in mammals, on the other hand, it is, without being precisely exceptional, nevertheless far from common. 3. The pigment is in health distinguished by the large and varying size of its individual particles, as may be best seen in birds and in the liver of malarial disease. 4. The chief factors influencing its presence in this situation and its amount in health are: (*a*) the size and shape of the animal's red corpuscles, determining as this does to some extent, first, the mode of death, and, secondly, the size and shape of the largest of the pigment particles. The larger the animal's corpuscles the more likely is pigment to be found. It is hence more common in birds than in mammals. (*b*) The age of the animal. The amount of pigment tends to increase with age. In young mammals its presence is the exception. (*c*) Abstention from food and want of exercise. By feeding an animal sparingly, especially if at the same time it be shut up, the amount of pigment in this situation tends, I find, to increase. Thus my observations show that in the livers of pigeons kept shut up for several months it will, other things being equal, be greater than in birds not so confined. It is in this way that the influence of the second factor—age—is to be explained. 5. A considerable increase may take place under pathological conditions as the result of disease, or be induced experimentally by the action of certain agents that destroy the blood. Such an increase is, however, not constant, even in the same animal. Within the liver cells: The capillaries are not the only situation where pigment is to be found within the liver. The liver cells also frequently contain pigment—sometimes, indeed, in far greater abundance.

In Birds.—I show you now sections from the liver of the duck and the pigeon. You will note that in addition to the larger particles of pigment present in the capillaries pigment granules of an altogether finer character are seen lying within the liver cells. It is even more abundant in the case of the duck than the pigeon. I ask you particularly to note the size of these granules as compared with those lying within the capillaries. While the latter are large and of varying size, the larger of them having a diameter of as much as 10–15 mm., the granules within the liver cells are uniformly small, having a diameter not exceeding 1–2 mm. Both varieties give a well-marked reaction of iron. I ask you, moreover, to note that there is apparently no strictly defined relation, as regards amount, between the pigment in the two situations. In some parts pigment is to be seen in the liver cells and in the adjacent capillaries; in others it is abundant in the capillaries and absent or only sparingly present within the liver cells; and lastly—and this is best seen in the duck's liver—it may be abundant in the liver cells, while little or none is to be found in the capillaries.

In mammals the presence of pigment within the liver cells is altogether less common and less marked—at least in health. It is in the form of fine granules, occupying for the most part the cells of the portal zone of the lobule. So small in quantity is it in the rabbit, for example, that the liver tissue gives but a slight reaction when tested with sulphide of ammonium for the presence of iron, instead of the very definite reaction which we have seen in the case of the pigeon and the duck. At least, this is the case unless, as Drs. Brunton and Delépine have

[1] Dictionnaire Encyclopédique des Sciences Médicales, tome vi., Art. Sang, pp. 445 446.

shown, the animal be in full digestion at the time. The same applies to the liver of the dog, the cat and of man. Here, in passing, I may note that throughout my observations I have always attached great importance to the examination of the fresh tissue. The best micro-chemical reagent for revealing the presence of free iron, or iron containing pigment in fresh tissues, is, according to my observations, sulphide of ammonium. A piece of fresh liver tissue placed in sulphide of ammonium takes on a colour varying from light greenish-yellow to coal black, according to the amount of free iron it may contain. If a piece of this tissue be teased out in sulphide of ammonium and examined at once microscopically, the pigment will be seen as coal black spherical granules, or as a diffuse greenish stain, according as it is in the form of granules or diffused in more soluble form amidst the protoplasm of the cell. For the fresh tissue sulphide of ammonium appears to me to be a far more delicate and reliable reagent than, for example, ferrocyanide of potassium and hydrochloric acid (Prussian-blue test). The reaction, if any, is developed at once, and without any injury to the cell protoplasm, whereas with the Prussian-blue test the degree of colour always depends to some extent on the length of time the tissue is allowed to be in contact with the reagent. Hence if, as sometimes happened, the two reagents gave results apparently not in agreement with each other—if, for example, the tissue after hardening gave little or no reaction of iron, whereas in the fresh condition it gave a considerable reaction—it was on the former and not on the latter that I relied most.

This difference in the behaviour of tissues before and after hardening is by no means uncommon. It is most common when the pigment is diffused throughout the cell, and it is due, in my opinion, to the circumstance that in the process of hardening the soluble pigment has diffused out. For this reason the best hardening agent is alcohol, Müller's fluid and other similar preserving agents are to be avoided. Tested in this way, the liver of young healthy mammals gives evidence of containing very little blood pigment. According to Drs. Brunton and Delépine[2] this amount is considerably increased during digestion. If then, as I think is the case, the presence of pigment within the liver cells in health is in mammals by no means a striking feature, the case is very different in certain forms of disease.

In Disease.—I show you sections from the liver in cases of pernicious anæmia. You note how very abundant is the pigment; how striking is the iron reaction it gives; and how characteristic is its distribution within the lobule. It lies within the liver cells, but not uniformly distributed amongst all the cells of the lobule. It is most abundant in the cells at the periphery of the lobule, while little or none is to be found in the cells of the inner third of the lobule. These latter are for the most part fatty, and are quite free from pigment. The pigment is in the form of granules, fairly uniform in size, although larger than those we saw in the liver cells in pigeons. It appears to occupy the axis of the rows of liver cells; but on careful examination with high powers it is in some cases seen to occupy a very definite relation to the bile capillaries. It lies close to the edge of the cell, as if in process of being excreted into the bile capillary. In no disease, as I have elsewhere shown,[3] does the amount of pigment found in the liver ever exceed—it rarely ever approaches—that present in pernicious anæmia. A large increase of pigment within the liver cells can, I find, be experimentally brought about by injection of certain substances into the blood. Such an increase I show you in the case of three animals, rabbit (Experiment 42), dog (Experiment 64), and of a pigeon (Experiment 72), induced by the action of toluylendiamine. You will note how exceedingly abundant the pigment is, and how the appearance of the liver contrasts in this respect with that of the liver of the normal animal.

The conclusions, then, to be drawn from this portion of our study are as follows:—1. That another situation in which pigment may be found within the liver apart from extravasation or congestion is the liver cell. 2. The frequency with which it is met here in health, and its amount, differ in birds and mammals respectively. In birds it is usually present, sometimes in large amount. In mammals, on the other hand, while rarely ever absent, it is, according to my observation, not present in any great quantity. 3. The pigment presents certain peculiarities, more especially in respect of the small uniform size of its granules, which distinguish it broadly from that met with in health in the capillaries of the liver. 4. The conditions under which it arises also differ from those already seen in the case of the latter in the capillaries. (*a*) The small uniform character of the granules is as striking in birds, where the red corpuscles are large and oval, as in mammals, where they are small and round. (*b*) It is not increased in old animals. It is, on the contrary, more likely to be found in young animals than in old. (*c*) Abstention from food and exercise tends rather to diminish its amount. Thus my observations prove that it is not increased by withholding food from animals, or during inanition in man. Drs. Brunton and Delépine's observations show that it is increased during digestion in animals (rabbits). In all these respects therefore the conditions favouring the deposit of pigment in the capillaries and liver cells respectively are essentially different. 5. The only respect indeed in which they are the same is that in both cases I find an increase may take place as the result of disease, or may be induced experimently by agents acting injuriously on the blood. Even here, however, there is a difference, for the increase which may occur under such circumstances within the liver cells is far greater than anything ever observed in the capillaries. This is true at least of disease.

(To be continued.)

[2] Proceedings of the Royal Society, 1891.
[3] THE LANCET, Sept. 22nd and 29th, 1888.

THE BLOODVESSELS OF THE THYROID GLAND IN GOITRE.

BY R. M. HORNE, M.B., C.M. EDIN.

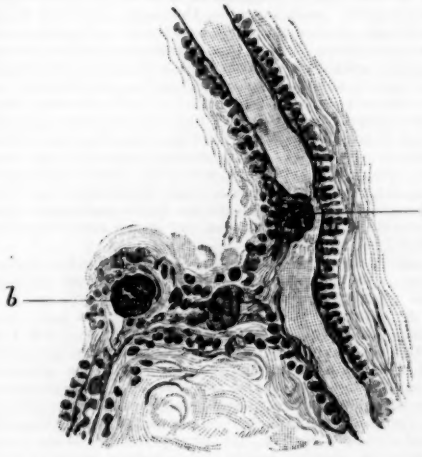
THIS communication is a short account of some work carried on during the present year in the Pathological Institute of the University of Strassburg, under the direction of Professor v. Recklinghausen, to whom I desire to express here my grateful thanks for his uniformly kind assistance and encouragement. Histologists have long pointed out the great richness of the blood-supply to the thyroid gland, and have demonstrated the existence of a comparatively thick media in the walls of its arteries. The morbid histology of the blood vascular system of this gland has been but little worked at,[1] Gutknecht alone of all the inquirers into the pathology of this organ having devoted much attention to it. Working on goitrous thyroids extirpated by Kocher of Berne, he claims to have demonstrated widespread hyaline changes in the walls of the bloodvessels, and also the presence of masses of colloid material in the lumina, both of those with degenerated walls and of those with still normal walls. These colloid masses he derives from the red blood-corpuscles of the circulating blood, in which a complicated series of changes leading to the formation of colloid is described. One is led to infer that these changes are induced by some influence exerted by the diseased thyroid. In the course of this research twenty-eight thyroids have already been examined. These, with one exception, were obtained post mortem. They include seven fœtal thyroids removed from fœtuses varying in development from between the third and fourth to between the seventh and eighth months; two from new-born children who had died at birth, one being premature about the eighth month, the other a full-time child; one from a child who had died a few days after birth, suffering from bronchitis and icterus neonatorum. The remaining eighteen were derived from individuals varying in age from six months to sixty-eight years, whose deaths had been induced by a variety of causes, comprising, for instance, such widely separated diseases as diphtheria, labyrinthitis purulenta and meningitis, tuberculous affections, asphyxia from drowning &c.

The glands were, with one exception, fixed in Müller's fluid and subsequently hardened in alcohol. The exceptional gland was treated with alcohol only. From these hardened specimens pieces were taken of a size convenient for embedding in celloidin or for cutting with the freezing microtome, which was, however, only occasionally used. Each piece, so far as practicable, was cut so as to contain more normal, preformed thyroid tissue along with

[1] Die Histologie der Struma: Virchow's Archiv, Band xciv., 1885.

one or more of the smaller adenomatous nodules. In cases where the nodules were too large to admit of this being done the piece was taken from the remains of the original tissue. In specimens not possessing nodules it is unimportant from what part the piece be taken. The pieces were generally obtained from the periphery of the gland with a portion of the capsule attached, and were cut at varying angles to the long axis of the lobe. The method adopted in the examination of these pieces, with the exception of the few earlier ones, was as follows. The piece was stained *en masse* in alum carmine, and, the excess of colouring matter having been carefully washed away in water, was subsequently hardened in absolute alcohol and then impregnated with celloidin in the usual manner. By this means the confusion so apt to arise between colloid material and celloidin is entirely avoided, as the latter, in contrast to the former, remains quite uncoloured and transparent. Each piece thus treated was cut in series. Serial sections were found to be necessary for the purpose of distinguishing definitely arteries from veins, veins from lymphatics and veins and lymphatics from distended follicles. The recognition of these various structures, often difficult and sometimes impossible from the examination of single sections, is readily accomplished if the structure under examination can be traced through a sufficiently large series of sections. The most important changes found in the course of this investigation are those developed in the arteries. These may best be described by a more detailed reference to one particular case in which they were very pronounced. The gland was removed post mortem from a young man aged nineteen. The section revealed the cause of death to be labyrinthitis purulenta with meningitis. Both lobes of the thyroid were small, and on longitudinal section were seen to be studded with numerous adenomatous nodules of various sizes, and distinctly encapsuled. Some were as large as a cherry, some were scarcely visible to the naked eye, and microscopic examination revealed others not seen macroscopically. Four pieces were taken for examination; three of these were cut in series after being embedded in celloidin; the other was also embedded in celloidin, but not cut in series. One piece only was stained *en masse* before being embedded and cut. Under the microscope the lobules of the gland are well defined and separated from each other by septa of normal fibrous tissue. Many of the gland follicles are composed of a solid group of cells without colloid; some contain a small quantity of colloid with a lining of low cubical cells, others are slightly distended from accumulation of colloid, which has led to a slight flattening of the lining cells. In addition to this—the original and more normal thyroid tissue—are seen circumscribed nodular areas of various sizes, which strike one at once from the depth to which they have taken up the alum carmine. They stand out in strong contrast to the less deeply coloured thyroid lobules. They have pushed aside the thyroid follicles in their growth, from which the older ones, at any rate, are separated by a capsule of fibrous tissue often containing many elastic fibres. The tissue composing the nodules is thyroid in its nature and represents the tissue of that gland in its various stages of development, from the branched, elongated, solid groups of cells through the stage in which the cells are arranged in round solid groups to the appearance of ordinary follicles containing colloid. In the older nodules the follicles become much distended and rupture of the walls between adjacent follicle is frequent, the cells, however, still retaining their cubical shape. The cells which build up these various structures in the nodule are much more deeply coloured than the cells of the normal thyroid follicles, and it is to these of course that the deep colour of the nodule as a whole is due. There are many other small, deeply stained areas to be seen which with low powers might in many cases be regarded as nodules in their youngest stage, but which with higher powers are found to be altered arteries. The alteration, which these arteries have undergone consists of a well-marked proliferation of their endothelium in localised areas, so as to form solid buds of cells projecting into the lumina of the vessels in which it occurs. Such a condition has not previously been described in the arteries of the thyroid, or, so far as I am aware, in the arteries of any other organ. A typical example of this bud-like proliferation is seen in Fig. 1 (*a*), in which an artery is shown in longitudinal section. The three coats of the artery are easily traced throughout its whole course. The media is particularly well marked, consisting of several layers of muscle cells in transverse section, and here and there on the intima flat endothelial cells are to be seen. At one point of the intima (*a*) there is a very evident projection into the lumen of the vessel. This is composed of a group of small, round or slightly polygonal, closely-packed cells, which stain well with alum carmine. The muscular coat passes entirely outside of this projection and is almost unaffected by it; perhaps slightly deflected to one side. The group of cells lies without doubt quite internal to the media in the intima itself, and can only have been developed by proliferation of the endothelial cells at that point. The innermost layer of cells—i.e., those towards the lumen—still retain their elongated, flattened endothelial character, but are larger and more distinct than normal, and form a continuous

FIG. 1.



covering over the projecting bud. The effect of this projection is evidently to considerably narrow the lumen of the vessel at the point where it is situated. In this section the lumen is reduced to a very narrow channel. The circulation has not been brought to a standstill thereby, as the vessel behind and beyond the bud is still filled with normal red blood-corpuscles. In a branch given off by this artery several such buds are found just at its commencement, although, owing to the obliquity of the section, their relation to the various coats of the vessel is not so satisfactorily shown. One bud (*b*) is seen lying free in the lumen, circular in shape and consisting of

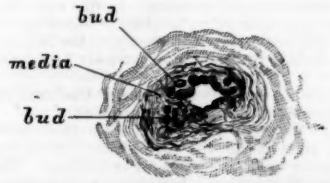
FIG. 2.

small round or polygonal cells surrounded by a layer of more endothelial-like cells.

In Fig. 2 another artery is shown in longitudinal section in which the bud-like proliferation of the endothelium is well displayed. This artery is remarkable for the number of buds present in the short length of vessel depicted. The buds themselves in their structure and position resemble that of Fig. 1. At several points also a commencing proliferation of endothelium is visible, which has not yet developed into a well-defined projection. The diminution in the size of the lumen is very evident. Transverse and oblique sections of

arteries with similar bud-like endothelial proliferations are naturally to be met with much more frequently than such beautiful longitudinal sections already figured, but are none the less characteristic. Two transverse sections are shown in Figs. 3 and 4. In the first of these the resolution of the wall into its three components is easily made, and there are seen to project from the intima two small rounded groups of cells resembling the buds already seen. In Fig. 4 the media is not so readily distinguished, but by following the vessel through a few sections all doubt of its arterial nature is removed. There are present in this section two projecting masses of cells: one is large and consists of cells similar in size and shape to those of the buds seen in longitudinal section, the innermost also partaking more of the nature of true endothelium, although in part of the margin they are more rounded than elongated. The other bud is much smaller, contains fewer cells, and is probably a younger stage of development. The endothelium lining the rest of

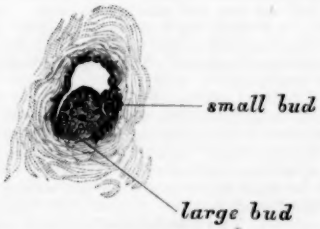
FIG. 3.



the lumen is well developed and almost resembles a low cubical epithelium. The lumen, although blocked to some extent by these buds, is in neither case completely closed, but still admits the passage of blood, normal red blood-corpuscles being present in both sections. Transverse sections of arteries displaying a more complete occlusion of the lumen than is here represented are readily found. What part is played by collapse of the walls of the vessel in this diminution in the size of the lumen it is difficult to determine. It would seem, however, to be small, for in most cases if the buds be supposed to have been removed there would remain a lumen large in proportion to the size of the vessel in which they are situated.

Perfect occlusion of arteries has not been satisfactorily demonstrated in this gland, but in one other it is frequently met with. In this specimen the lumen is filled with a mass of cells which cannot be resolved into bud-like pro-

FIG. 4.



jections. The cells resemble in size and shape those of the gland follicles, but stain somewhat more deeply. As it is often impossible to determine the presence of muscle cells in the wall of these occluded vessels, it becomes a matter of great difficulty to differentiate them from normal thyroid follicles. The difference in the depth of colour leads one to suspect their nature, but this can only be finally determined by tracing through a series of sections their connexion with the still functional arterial system.

While the proliferation of endothelium is generally directed inwards towards the lumen in the form of rounded buds, it is not always so. The groups of cells may cause little or no projection of the intima, but may develop outwards at the expense of the muscular coat, which is then only with difficulty, and sometimes not at all, to be followed at this point. Or again, as seen in some of the transverse or oblique sections of the smaller intra-lobular arteries, the proliferation is more general and forms several irregular layers of deeply coloured cells surrounding the whole circumference of the lumen. The size of the buds varies much within certain limits. A size often met with is seen in Fig. 4. Larger buds than these are occasionally found, and buds of all sizes between these and a slight elevation consisting of two or three cells occur. It is probable that the enlargement of single endothelial cells indicates the commencement of the process. In connexion with their significance and ultimate fate it is of importance to learn if the buds become detached from the wall of the artery from which they have sprung, to be carried along in the blood stream. Attention has therefore been directed to discovering any indication of such a narrowing of the base as would be expected to occur as the natural preliminary to a detachment of the bud in its entirety. No evidence of this has been observed. On the contrary, the buds, rounded or conical, possess a base as great, or almost as great, as any other diameter parallel to the base. Attempts have also been made by tracing in either direction transverse sections of buds (such, for instance, as *b* in Fig. 1) lying free, in transverse sections of arteries, to determine if they were free throughout. The presumption of course is that these are merely sections of the projecting ends of buds which have their base of attachment at a lower level than the plane of section. My observations confirm this view. It is therefore concluded that detachment of the buds in their entirety does not occur. It is possible, however, that individual cells are thrown off into the blood stream. Cells larger in size and more regular in shape than normal white blood-corpuscles have occasionally been seen lying free in the lumen of an artery, and may possibly have come from one or more of these buds. This is a point demanding further investigation.

One can scarcely avoid being struck by the resemblance between many of these buds and young gland follicles. The interesting question, then, naturally presents itself: Does colloid ever occur in the interior of a bud? Sections of arteries have been found in this thyroid having buds which contain in their interior colloid not to be distinguished from the colloid in the true gland follicles. From each of three other thyroids also a section of an artery having a bud with colloid in its interior has been obtained. The occurrence of such buds though rare is positive. It would seem therefore that they possess, in common with true thyroid follicles, the power of secreting or of producing colloid material.

It remains for me to decide the frequency of the occurrence of these proliferative changes—(1) in the arteries of this particular gland; (2) in the other glands examined; and (3) finally to determine whether this condition is confined to the arterial system. It has already been stated that four pieces were taken from this gland for microscopical examination. In all of the sections made from these, numbering over two hundred, arteries presenting the condition described were to be found with the utmost facility. It is not an over-statement to say that the majority of the arteries in many of the sections were so affected. The condition is evidently a widespread one. But while this is so, it has also to be remarked that the larger arteries are almost or altogether free from any such proliferative changes. It is in the smaller arteries, whether extra-lobular in the inter-lobular septa, or intra-lobular in the inter-follicular septa, that the condition is most frequently seen. It also occurs in some of the arteries in several of the nodules. The buds may develop at any part in the course of a vessel in which they are liable to occur, but are as a rule most frequent at the points where branches are given off, or in the branches themselves at their origin. In all of the eighteen more fully developed glands the same proliferative changes in the endothelial lining of the arteries have been observed to a greater or less extent, arteries so altered being generally found without much difficulty. Of these eighteen glands, eleven presented one or more adenomatous nodules in one or other lobe. The remaining seven, although not containing nodules, were more or less enlarged, the enlargement in all probability being either due to an accumulation of colloid in the follicles—shown in five of the seven and especially well-marked in one case of extreme enlargement—or to an increase in the number of follicles themselves. Of these, one was removed from a girl two years and a half old, who had died of catarrhal pneumonia. The enlargement was only slight. Sections of arteries having bud-like proliferation of their endothelium have been distinctly demonstrated, but occur rarely. The other belonged to a six months' old child. The gland was enlarged in both lobes. On microscopic examination the alteration in the arteries is frequent and pronounced.

No colloid is present in the follicles of either of these two glands. One thyroid was obtained from a woman aged fifty-eight, in whom a slight exophthalmos was present. The cause of death was pneumonia. Both lobes of the gland were enlarged, the right much more than the left. The large size of the right lobe was seen on section to be due to several large colloid degenerated nodules—one of them cystic—which had reduced the original tissue to a minimum. In the left lobe several smaller nodules were also observed. In most of the sections made from the more normal part of the right lobe, as well as in those made from the left lobe, many arteries with bud-like proliferation of their endothelium were present. In the three thyroids obtained from new-born children the same changes were found, in varying degree. In that of the premature child, and in that of the icterus neonatorum case, it was only after the examination of numerous sections that distinct evidence of endothelial proliferation in the arteries was gained; in the other case, however, arteries so altered were present in the greater number of sections made. This gland was slightly enlarged. It was difficult to decide whether enlargement was present in the other two. Careful section of all three did not display any nodules.

Of the seven fœtal glands examined, arteries having buds have been satisfactorily demonstrated in four, doubtfully in one, and not at all in the remaining two. In none of the four glands in which such arteries are found does the condition occur with the frequency associated with most of the other glands examined. One of these, removed from an anencephalic fœtus, was decidedly enlarged in both lobes, no nodules were observed macroscopically or microscopically, and no colloid in the follicles. A large number of sections were made from this specimen, but in only a few were altered arteries found. As to the distribution of this proliferative change, great pains have been taken to determine whether it is confined to the arterial system. Without going into details it will be sufficient to state that no evidence of its occurrence in the endothelial lining of the veins has been obtained. My observations on the capillaries do not as yet admit of any definite conclusions.

It is not my intention to enter into a discussion of the bearing which these observations may be supposed to have on our views of the physiology and pathology of the thyroid. A more extended investigation of the various points here cursorily dealt with is necessary before any general conclusions can be based upon them. I am at present carrying on this research in the laboratory of the Royal College of Physicians, Edinburgh.

Slamanan, Scotland.

A REPORT OF TWENTY-TWO CASES OF INTUBATION OF THE LARYNX.

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OF the twenty-two cases of intubation of the larynx here reported sixteen occurred under the care of some of my colleagues at the West London Hospital, and the remaining six were cases in private practice to which I was called by the medical men who were in attendance. The majority of the hospital cases I was enabled to follow throughout, owing to the courtesy of my colleagues, to whom I am also indebted for permission to publish the cases. All the patients were children, and they ranged in age from thirteen months to eight years. Of the twenty-two cases ten recovered. Intubation was performed in every case for symptoms of acute laryngeal stenosis which threatened the life of the child, and as the alternative of tracheotomy. In two cases the laryngeal trouble arose from traumatic causes—in one from swallowing very hot tea, in the other from swallowing carbolic acid. The rest were cases of laryngitis, simple or membranous (diphtheritic); it was not always possible to determine which. In five cases the disease was secondary to measles. Four of these died. In seven cases tracheotomy was performed after intubation had been tried, principally because the tube seemed to be clogged with membrane or secretions. All of these died.

In the cases which recovered the tube was left in the larynx for periods varying from three to thirteen days, the average period for the ten cases being eight days. The thread was allowed to remain *in situ* in four cases, and in one of these it is noted that the child dragged the tube out by its means. In the rest of the cases the thread was removed immediately after the introduction of the tube. In all my own cases I removed the thread at once, and I have no doubt it is the best plan. In two cases (Cases 13 and 15) an ulcer was found post mortem on the anterior wall of the trachea, at a point corresponding to the position of the lower end of the tube. It is only right to mention that the tubes used in these cases were not constructed in accordance with O'Dwyer's later patterns. Case 16 is an instance of "death on the table," a rare occurrence with intubation. I have no intention here to make any remarks on the value of intubation or on the relative merits of intubation and tracheotomy. I will merely say that in two of my own cases (Cases 17 and 21), both of which recurred, tracheotomy had been previously recommended as the only chance of saving the child's life, and had been declined by the parents owing to the slender hope which was offered even if the operation were performed. In both of these cases they gladly consented to the mild and bloodless operation of intubation, although I only held out an equally slender hope of recovery. In this way I am sure that some lives may be saved by intubation which would otherwise not be saved, and, moreover, the operation is not so likely to be deferred until the child is *in extremis*, as tracheotomy too often is.

The following is a brief epitome of the notes taken. The sixteen cases first in order are hospital ones.

CASE 1.—Boy aged two years. Admitted to hospital on July 26th, 1889, under the care of Mr. Weiss, for a scalded throat, caused by drinking almost boiling tea. Marked signs of laryngeal obstruction. Intubation was performed on the evening of the 26th; immediate relief. Fed by enemata only. Tube removed on the 29th. No return of dyspnœa. Recovered.

CASE 2.—Boy aged four years. Admitted to hospital on July 27th, 1889, under the care of Dr. Drewitt, with a history of having swallowed about a teaspoonful of carbolic acid. Some hours after admission marked signs of laryngeal obstruction supervened. Intubation was performed. The laryngeal symptoms were relieved, but the breathing became very rapid and the child more and more cyanosed. Died on the following day. At the post-mortem examination there were found ulceration of the pharynx, slight gastritis and bronchopneumonia.

CASE 3.—Boy aged four years. Admitted to hospital on Oct. 16th, 1889, under the care of Dr. Drewitt. Had been ill a week. Diphtheritic membrane was present on tonsils. There was considerable laryngeal dyspnœa. The urine contained albumen. Intubated on the evening of admission. On Oct. 17th the tube was coughed up, together with a long membranous cast from the trachea. Dyspnœa soon returned and the tube was reintroduced. On Oct. 19th marked signs of broncho-pneumonia appeared, the temperature rising to 102° or 103° on this and subsequent days. The tube was removed on Oct. 20th, but had to be replaced. On Oct. 23rd the tube was coughed up, and as the breathing continued easy it was not again replaced. The lungs gradually cleared and the child recovered.

CASE 4.—Girl aged two and a half years. Admitted to hospital on Aug. 25th, 1890, under the care of Dr. Drewitt, with symptoms of bronchitis and laryngitis, which had existed for two or three days. Intubation was performed soon after admission, with immediate relief of the laryngeal dyspnœa. The tube remained *in situ* until Sept. 1st, when it was removed and was not further needed. The bronchitis gradually cleared up. Recovered. Two months later this child was readmitted with similar symptoms, was intubated and recovered.

CASE 5.—Boy aged one year and ten months. Admitted to hospital on Oct. 19th, 1890, under the care of Dr. Hood, with marked laryngeal dyspnœa. The child was much cyanosed on admission. No membrane visible in the pharynx. Intubated immediately, with complete relief. The tube was coughed up in the night and was immediately replaced by a larger size. During the following days the tube was removed twice, but had to be replaced on account of the dyspnœa. On Oct. 31st the tube was finally removed. On Oct. 30th signs of bronchopneumonia set in, which ran a course of ten or eleven days. Recovered.

CASE 6.—Girl aged four and a half years. Admitted to hospital on Oct. 21st, 1890, under the care of Dr. Hood. She had suffered from symptoms of laryngitis for two days. On admission she was cyanosed, and had marked recession of lower ribs on inspiration. No membrane in the pharynx. Urine contained a trace of albumen. Intubated at once with

complete relief. The tube was removed on the 23rd, and again on the 26th, but had to be replaced. On the 31st the tube was finally removed. Recovered.

CASE 7.—Boy aged four years and eleven months. Admitted to hospital on Oct. 28th, 1890, under the care of Dr. Herringham. The child had measles a week previously, and a croupy cough and stridulous breathing for three days. There was much swelling of the glands of the neck and diphtheritic membrane on the tonsils. Intubated immediately, and was relieved for a time. On the morning of the 29th the child pulled the tube out by means of the thread, which had been left *in situ*. It was replaced immediately. The breathing, however, became worse. Tracheotomy was performed, but the child died in the course of the day.

CASE 8.—Girl aged two years and three months. Admitted to hospital on Oct. 31st, 1890, under the care of Dr. Drewitt. She had measles a week previously. Breathing was bad for three days. Marked signs of laryngeal obstruction. Intubated soon after admission. Was relieved for a time, but much mucus collected in the throat, which the child did not seem able to clear away by coughing. Crepitation in both bases. Temperature rose to 104°. Tracheotomy was performed, with temporary relief. The child died next day.

CASE 9.—Boy aged three years and two months. Admitted to hospital on Nov. 11th, 1890, under the care of Dr. Hood. The child had measles ten days previously. Croupy cough and gradually-increasing dyspnœa for three days. On admission there were signs of severe laryngeal obstruction. No membrane was seen in the pharynx. Urine contained albumen. Intubation was performed at once. Continued easy until Nov. 14th, when broncho-pneumonia developed. The breathing became more difficult. Tracheotomy was performed on Nov. 15th. The child died on the 17th.

CASE 10.—Boy aged four years. Admitted to hospital on Nov. 12th, 1890, under the care of Dr. Hood. The child had difficulty of breathing for three days. On admission he was cyanosed, and had signs of marked laryngeal obstruction. No membrane was seen in the pharynx. He was intubated immediately, and seemed much relieved for a time. On Nov. 13th the breathing had become more laboured. Tracheotomy was performed, but without apparent relief. Died on Nov. 14th.

CASE 11.—Boy aged three years. Admitted to hospital on Jan. 24th, 1891, under the care of Dr. Herringham. The child was perfectly well until the previous evening, when difficulty of breathing set in rather suddenly. On admission there was stridulous breathing. There was no membrane in the pharynx, and no albumen in the urine. On the evening of admission the dyspnœa had increased so much that intubation was performed. The child continued comfortable after this. The tube was removed on several subsequent days, but had to be replaced on account of return of the dyspnœa. On Feb. 6th the tube was finally removed. Recovered.

CASE 12.—Girl aged two and a half years. Admitted to hospital on Jan. 25th, 1891, under the care of Dr. Herringham. The child had not seemed well for a week. There had been difficulty of breathing for two days. Diphtheritic membrane was present on the tonsils. The urine contained albumen. The dyspnœa gradually increased and intubation was performed on the evening of admission. Relief was obtained for a time, but on the following day the tube seemed much clogged. It was removed, washed and replaced, but soon seemed clogged again. On the morning of the 27th tracheotomy was performed. The patient was relieved for a time, but she died the same evening.

CASE 13.—A girl aged thirteen months. Admitted to hospital on March 15th, 1891, under the care of Dr. Herringham. She had suffered from a croupy cough and noisy breathing for two days. On admission there was marked laryngeal obstruction and some lividity. There was no membrane to be seen. Intubation was performed soon after admission. The tube was coughed up on this and the following day, but had to be reintroduced owing to dyspnœa. During the two following days signs of broncho-pneumonia developed, and the child died on the night of the 18th. At the post-mortem examination no membrane was found anywhere. On the anterior surface of the trachea, corresponding with the position of the lower end of the tube, was a small round ulcer. There was another superficial ulcer on the anterior wall of the larynx, at the level of the cricoid cartilage.

CASE 14.—A boy aged two years and eleven months. Admitted to hospital on Feb. 24th, 1892, under the care of Dr. Herringham. He had suffered from difficulty of breathing for a few days previously. On admission there were marked laryngeal obstruction and lividity. Intubated immediately. The patient died on Feb. 25th. On post-mortem examination membrane was found to be present in the larynx, trachea and bronchi.

CASE 15.—Boy aged one year and five months. Admitted to hospital on Feb. 26th, 1892, under the care of Dr. Hood. The child was suffering from severe laryngeal dyspnœa. Patches of diphtheritic membrane were visible in the pharynx. He was intubated immediately. The tube was coughed up after two hours and replaced at once; it was also coughed up again next day and on the day following. On the latter occasion it was replaced by a larger tube. On the evening of the 28th the dyspnœa increased. Several pieces of membrane were coughed up, but the tube seemed to be more or less blocked. Tracheotomy was performed, when the breathing became easier for a time. The child died on Feb. 29th. On post-mortem examination membrane was found in the larynx, trachea and bronchi. On the anterior surface of the trachea, opposite the position of the lower end of the intubation tube, was a small, round, superficial ulcer.

CASE 16.—Boy aged one year and five months. Admitted to hospital on Feb. 1st, 1892, under the care of Dr. Herringham, for chronic diarrhœa. On March 5th measles developed. On the 10th a croupy cough and some laryngeal obstruction were present. There was no membrane in the pharynx. On the 11th the dyspnœa had increased very much and intubation was performed by the house surgeon in charge. The tube was only introduced after a somewhat prolonged attempt, and the child had by this time ceased to breathe. The tube was at once drawn out by means of the string. Artificial respiration was resorted to and subsequently tracheotomy, but the child did not breathe again. On post-mortem examination no membrane was found in the larynx, trachea or elsewhere.

The remaining six cases came under my own care in private practice.

CASE 17.—Boy aged two years and three months. I was asked to see the case by Dr. Denton of Brixton on Feb. 26th, 1890. The child had a croupy cough for five days, and some laryngeal stridor for three days. No membrane was visible in the pharynx. The symptoms of laryngeal obstruction did not seem sufficiently urgent at my first visit to interfere. I was summoned on the morning of the 27th, when the laryngeal dyspnœa was very urgent. I performed intubation, and immediate relief followed. The tube was removed on March 3rd, but the dyspnœa returned in about an hour and I had to replace the tube. An attempt was made to dispense with the tube on March 5th, 7th and 10th, but on each occasion it had to be replaced. It was finally removed on March 12th. The child recovered.

CASE 18.—Boy aged thirteen months. I was asked to see the case by Dr. Starkie of Sussex-street on March 26th, 1891. The child had been suffering from whooping-cough for a month. Croupy symptoms had existed for two days. He was somewhat cyanosed and presented marked signs of laryngeal obstruction. I performed intubation and immediate relief followed. On March 27th the temperature rose to 104° and signs of broncho-pneumonia appeared. The pneumonia became extensively developed throughout both lungs during the following two days, and the child died on April 1st. The tube was not disturbed after its insertion, and the child breathed freely through it up till the time of death.

CASE 19.—Boy aged five years. I was called to see the case by Dr. Starkie on Nov. 16th, 1891. The boy had been suffering from broncho-pneumonia, from which he had recovered about a week. He had hoarseness and croupy cough for three days and some laryngeal stridor since the previous day. When I saw him there was very marked laryngeal obstruction. There was no membrane to be seen in the pharynx. The urine contained albumen. I performed intubation and the dyspnœa was immediately and completely relieved. On Nov. 19th I removed the tube and it did not require to be again inserted. Recovered.

CASE 20.—Girl aged eight years. I was asked to see the case by Mr. Reinhardt of Battersea on Feb. 13th, 1892. She had suffered from croupy cough and laryngeal dyspnœa for three days. There were diphtheritic membrane on the tonsils, much infiltration of the lymphatic glands of the neck and the urine contained albumen. There were signs of severe laryngeal obstruction and the child was considerably cyanosed. I performed intubation, and the breathing was completely relieved and continued so until the following day, when the child died rather suddenly after a fit of coughing.

CASE 21.—Boy aged six years. I was asked to see the case

by Mr. Sequeira and Mr. Jones of Leman-street on April 22nd, 1892. The boy had just recovered from measles and had croupy symptoms for four days. A fatal case of diphtheria had occurred in the house in which the child lived five weeks previously. There was no membrane to be seen in the pharynx. The urine contained albumen. The signs of laryngeal obstruction were very marked. There were fine râles at both bases. Temperature 103°. I performed intubation, with immediate relief of the laryngeal symptoms. During the following days extreme broncho-pneumonia developed, but the laryngeal breathing continued easy. The tube was removed on April 28th, and did not need to be replaced. The pneumonia ran a severe and prolonged course, but the child ultimately recovered.

CASE 22.—Boy aged one year and eleven months. I was asked to see the case by Dr. Shaw-Mackenzie on July 23rd, 1892. The child had suffered from croupy cough and gradually increasing laryngeal dyspnœa for three days. There was no membrane in the pharynx and no albumen in the urine. The signs of laryngeal obstruction were very urgent. Intubation was performed, with immediate relief. The tube was removed on July 28th, but the dyspnœa became so severe after a couple of hours that it had to be replaced. It was finally removed on July 30th and the child recovered.

Wimpole-street, W.

"ABDOMINAL SECTION IN CERTAIN CASES OF PELVIC PERITONITIS."

BY G. ERNEST HERMAN, M.B., F.R.C.P. LOND.,
OBSTETRIC PHYSICIAN TO THE LONDON HOSPITAL ETC.

IT was my intention to take part in the discussion at the Obstetrical Society on Dr. Cullingworth's paper under the above title, but I was obliged to leave before the end of the meeting. The paper was a most valuable contribution to our clinical knowledge of inflammation of the uterine appendages. Its value lay in the features—first, that it was a plain record of every case, without selection; secondly, the cases occurred in a public hospital under the eyes of keen critics, so that Dr. Cullingworth was guarded against deceiving himself either as to the gravity of the symptoms before operation or the reality of the relief afterwards; thirdly, in relating the results, survival from the operation was not taken as cure, and there were no such phrases as "cure," "the happiest results" &c., but the patients were watched as long as possible, and the patient's actual state was given. I know of no publication in this country of so large a number of cases observed and reported in this accurate and complete way.

Some of the criticisms of the paper were inconsistent. It was urged that the mortality from pelvic peritonitis and from inflammation of the tubes was much smaller than Dr. Cullingworth's operative mortality; and at the same time the title was found fault with, because in so many of the cases there were tumours or abscesses. The latter fact made the former criticism not apply. Then Schmalfuss's valuable paper was quoted as bearing on the subject, but his operations were performed for "castration for neuroses," and in Dr. Cullingworth's paper there was not a single case in which the operation was done for a neurosis. This is important, because it explains the high death-rate as compared with the statistics of some other operators. In operations for the removal of the uterine appendages there is an inverse relationship between the death-rate from the operation and the proportion of cures. An operator who removes a great number of almost healthy tubes and ovaries for pain and other nervous symptoms will have a low death-rate from the operation, but a great number of failures to cure; whereas one who, like Dr. Cullingworth, only operates on cases believed to have serious organic disease will have a higher death-rate from the operation, but a large proportion of permanent cures. With regard to the question of cure, a discussion in Paris is reported in the *Annales de Gynécologie* for 1891, in which seven French surgeons brought forward lists of cases in which they had followed up the after-histories of the patients. Added together these comprised 288 cases, with 230 permanent cures, or 82 per cent. of cures and 18 per cent. of failures. Without complete details I cannot say that these cases were strictly comparable to Dr. Cullingworth's, but they are probably more comparable than those of Schmalfuss.

This paper was not brought forward that we might admire Dr. Cullingworth's diagnostic and operative skill, but to influence practice. The propositions laid down at the end are the important part of it. I can from my own experience confirm Dr. Cullingworth's statement that in suppurated ovarian cysts the temperature is often normal. I exhibited to the Obstetrical Society[1] a specimen which supported Proposition 14. I doubt the correctness of Proposition 11; for I think the most common cause of pelvic peritonitis in the virgin is catarrh of the genital passage extending along the tube to the peritoneum. Such cases generally end in complete and permanent recovery, so that this view of their pathology is not verified; but cases admitting of this interpretation are, in my experience, far more frequent than tuberculous disease. Proposition 3 is the one which, if accepted, will have the largest influence on practice; and here I regret that I cannot follow Dr. Cullingworth. I do not think that the sooner surgical treatment is carried out the better; for I am sure that many (not all) cases in which there are distinct swellings in the posterior quarters of the pelvis, and there have been recurrent attacks of pelvic peritonitis, will get practically well if they are given sufficient rest in bed, combined with other proper treatment. In illustration I may refer to Case 31, in which the result was most satisfactory; but the patient had been in hospital only two days when the operation was done, and the conditions found were such as tend to recovery when the patient is under favourable conditions. In Cases 22 and 23, operated on seven and fifteen days after admission respectively, had the operation been postponed for a few weeks the apparent necessity for it would have disappeared. Dr. Cullingworth would no doubt in reply point to cases in which life was lost from the postponement of the operation, and I admit that the teaching of those who do not agree with him may lead to errors in this direction. But, looking at the proposition as framed by himself, I think that the unnecessary operations which would be done if it were generally acted on would lead to loss of life and suffering to patients greater than would come from the practice of never operating for inflammatory disease until medical treatment had been given a prolonged trial. I can therefore only adopt Dr. Cullingworth's third proposition with the alteration that surgical relief is sometimes called for, but should not be undertaken till medical treatment has been fully tried. Proposition 6 I think too sweeping. No general assertion like that can be applied to every case. Suppurating cysts out of reach by the vagina are better dealt with by the abdominal method. Mr. Doran reminded us of the recent innovation introduced by French surgeons—viz., the removal of the uterus per vaginam for pelvic suppuration. I think that removal of the uterus in such cases is an unnecessary mutilation; but the proceeding preliminary to this, the "*débridement vaginale*"—that is, the division of the vagina round the cervix uteri, securing its vessels and freeing it, and then breaking open purulent collections in the broad ligament with the fingers—I think an improvement, which may sometimes obviate the necessity for abdominal section.

In conclusion, I think Dr. Cullingworth's practice will become that of the future. Just as physicians in the early days of ovariotomy, when nearly half the patients died from it, advised postponement as long as possible, but now advocate its performance as early as possible, so I have no doubt that as diagnosis becomes more accurate the cases proper for operation will become capable of better definition, and early operation will be the rule. At present the diagnosis of the cause of pelvic peritonitis is so obscure that I think if early abdominal section were the general practice in all cases of pelvic peritonitis, the mortality from the operation would be greater than that from the disease.

Harley-street, W.

[1] Transactions of the Obstetrical Society, vol. xxxiii., p. 453.

HYÈRES SANATORIUM.—This institution, which has been closed for some time, has been reopened with improved arrangements and considerably increased accommodation. The sanatorium, which is intended principally for the children of the poor of Lyons who are suffering from scrofula, contains 100 beds, and in order that the children may have sea-water baths throughout the year funds have been provided for heating the water during the winter months. The children will be brought from Lyons in a specially constructed saloon carriage.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se compare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

GREAT NORTHERN CENTRAL HOSPITAL.

COLLAPSE AFTER OVARIOTOMY; TRANSFUSION; RECOVERY.

(Under the care of Dr. LEONARD REMFRY.)

THE following short account of a rare complication during the after-treatment of a case of ovariotomy is important, and there are two points to which we would draw attention. The first of these is the complication itself, and it is very probable that Dr. Remfry's idea is the correct one—namely, that the gradually developing collapse was due to a hæmorrhage. The symptoms were similar to those developed in two cases of concealed intra-peritoneal hæmorrhage from slipping of the ligature of the ovarian pedicle which were under our observation, in which the wound was opened and ligatures reapplied. In both the pedicles appeared to be quite secure at the completion of the operation. Both of them ended fatally, but it is possible that had the method and advantages of saline infusion been known and practised, a different result might have been obtained. Dr. Remfry's case illustrates the value of warm saline infusion, for it is difficult to do otherwise than describe the rapid improvement which followed its employment, to its influence on the system at large. It has been suggested that the effect of a saline infusion is more marked when a condition of collapse is due to loss of blood than when it is unattended with hæmorrhage, or the loss of blood is not a considerable factor in the case. Although our knowledge is daily increasing we still require the record of recent observations as to the result of this treatment in cases of excessive shock with tendency to a fatal collapse. A debate at one of the societies would do much to help us if the members would contribute their facts and not give opinions only.

A married woman aged twenty-eight was admitted to the Great Northern Hospital on Oct. 12th, 1892, for operation. On examination per abdomen there was a large, rounded, fluctuating tumour rising to within three inches of the ensiform cartilage, rather more prominent on the right side. In the right hypochondrium some solid masses were detected. Dulness was present over the tumour generally, comparative resonance in both flanks and distinct resonance above. Fluctuation was very marked from any part of the swelling to the anterior vaginal fornix. The uterus was behind and to the right.

Dr. Remfry performed ovariotomy, assisted by Mr. Raymond Johnson. The operation was a very simple one. There were no adhesions. The tumour, which contained a dark grumous fluid, was for the most part unilocular, but contained a few secondary cysts. The pedicle was broad and contained some unusually prominent vessels. These were first of all tied separately and then the rest of the pedicle secured in the usual way, including the first ligature. The stump was returned perfectly dry. The patient took the chloroform well and the whole operation did not occupy more than forty minutes.

All went well till 8.30 P.M.—i.e., five hours after the operation,—when the patient began to vomit and retch repeatedly and became very restless. The temperature was slightly subnormal; pulse 120. She gradually grew paler and more restless, complaining continually of pain in the left iliac fossa. At 10 P.M. the pulse was 140 and hardly to be detected at the wrist. Ether and brandy were subcutaneously injected and a little champagne given by the mouth. The collapse continued with cold extremities and perspiration. A nutrient enema containing brandy and opium was given. Later on Dr. Remfry was sent for, and on arrival at 2 A.M. found the patient in much the same condition. She was apparently moribund, with extreme pallor, cold extremities, and cold sweat. Temperature 97·8°; pulse extremely feeble and fluttering in right radial, not to be felt at all in the left. Respiration relatively good, never becoming markedly shallow or sighing in character, and about 30 per minute. Examination per vaginam found Douglas's pouch apparently empty. Any reopening of the abdomen was of course out of the question on account of the extreme collapse. It was decided to try transfusion as the last chance. The apparatus was of the simplest, consisting as it did of a glass cannula, some indiarubber tubing, and an ordinary brass ward syringe. The fluid was ordinary salt and water (one drachm and a half to the pint) at a temperature of 110°. The right median basilic vein was opened in the usual way, and the cannula tied in. Altogether about two pints and a half were injected with numerous short intervals during the refilling of the syringe, and one long one of several minutes. After about half a pint had been used there was a distinct improvement, for the left radial pulse could be distinguished, though quite uncountable. Before the operation was completed the lips showed a faint pink colour and the extremities began to be warm, the patient voluntarily expressing herself as feeling better. The pulse was now countable, 170.

Very gradual improvement continued. At 5 A.M. there was a slight rigor, the temperature rising to 100·8°. A hot brandy and beef-tea enema was given, and as the patient was very thirsty she was allowed to sip hot water occasionally. At 8 A.M. the temperature was 99·6°, the pulse 180, stronger; the extremities were warm and the mucous membranes not anæmic. An enema containing forty grains of quinine was given, and ordinary nutrient enemata were ordered every four hours. After this the patient had some good sleep, and at 10.30 A.M. the temperature was normal and the pulse 137. During the day all went well, and in the evening the temperature was normal and the pulse 105. Some champagne and milk and soda by the mouth were retained. After an excellent night's rest the patient next morning was in good spirits, complained of no pain in the abdomen, had a normal temture, and a good pulse of 100. Eleven days after the operation she was practically well; the abdominal wound was well healed, and there were no abnormal symptoms of any kind.

Remarks by Dr. REMFRY.—The case is a highly interesting one—first, because of the extreme collapse so gradually developed; and, secondly, because of the equally gradually developed recovery and the efficacy of the transfusion. What was the cause of the collapse? It is impossible to speak with certainty. Was it hæmorrhage or was it one of those obscure disturbances of sympathetic origin? Against the theory of hæmorrhage it is impossible to bring forward any one decisive argument. The following details, however, should not be lost sight of, as collectively they are important: (1) the special care with which the pedicle was tied and its bloodless appearance before the abdomen was finally closed; (2) the steady improvement under transfusion, without the occurrence of any further, even temporary, collapse; (3) the absence of the least resistance in Douglas's pouch; (4) the almost normal respiration throughout. I may say that, beyond passing a sponge into the pelvis and feeling the left ovary with two fingers, there was no manipulation inside the abdomen. My thanks are due to my house physician, Dr. Mason, for his great assistance in the treatment adopted and also for his accurate notes of the case.

LANCASHIRE COUNTY ASYLUM, RAINHILL.

A CASE OF FATAL COMA OF UNEXPLAINED ORIGIN.

(Under the care of Dr. W. F. MENZIES, Senior Assistant Medical Officer.)

THE following case was one of ordinary lactational melancholia ending fatally by convulsions and coma. Somewhat similar instances occur now and then, and are too often, we fear, passed over as unrecognised uræmia or general paralysis. The more we know about toxalbumoses the more do we incline to the belief that they may be the cause not only of the acute and delirious types of functional brain disorders, but also of the slower melancholic and stuporous. The former have, in fact, been long assigned to this origin. The recital of such cases may in the future throw some light upon the pathology of coma. In the series of sixty-four deaths from coma, out of 1000 investigated by Dr. Wynn Westcott, as coroner, in a London district, the cause for it was described as due either to excess of serum in the brain or effusion of blood; in a few cases congestion of the brain was alone detected at the post-mortem examination.

A married woman aged thirty-four was admitted into Rainhill Asylum on Dec. 3rd, 1891. She was emotional, excitable and hot-tempered as a girl, but always abstemious and of steady, regular habits. She had had no fevers, rheumatism, dropsy or fits; no infantile convulsions. The patient had been married eleven years; her five children were all alive and healthy, their ages ranging from ten years to twenty months. She had had no miscarriage. The husband said he had syphilis five years before marriage, but had been thoroughly treated. His doctor told him the cure was complete, and he might marry with impunity. He showed no traces of the disease. For two years he had been out of work, and nine months ago the landlord sold the furniture for rent. This seemed to have preyed upon his wife's mind so much that, after growing gradually more depressed for four months, she showed signs of suicidal propensity, and was removed to the workhouse hospital. Up to this date she had been nursing her youngest child. Afterwards she improved in health and was allowed to go home, but five weeks before admission she was found by the police wandering aimlessly about the streets at night. She then complained of great headache and dimness of vision, saying she felt as if her "brain was being twisted round," and was in terror of harming her children if left alone with them.

On admission the patient was a well-nourished woman, but flabby and toneless, with muddy, greasy skin and dark complexion. Pupils 5·5 mm., equal, of regular outline and normal reaction. Tongue clean, moist, steady on protrusion. Forehead drawn up into deep horizontal furrows. No facial tremors. She complained of an unpleasant taste in her mouth; other special senses normal. No impairment of general sensory or motor nerves; optic discs and retinæ normal. Heart not hypertrophied; other thoracic and abdominal organs normal. Urine: 1770 cc. in twenty-four hours; sp. gr. 1016, reaction faintly acid; no trace of albumen, bile, blood or sugar. Urea: 28·34 grammes. The mental condition was one of semi-stupor, with a good deal of general depression; recent memory much impaired; attention deficient; could be roused easily to answer ordinary questions rationally; when left alone sat motionless, with hands folded and eyes cast down; was not resistive; she said that she felt as if there were "race horses rushing round" inside her head. The patient's condition remained unchanged for nine days. Temperature normal; the stupor deepened, and habits became wet and dirty; was always thirsty, and would if permitted drink a large bedroom ewerful of water at one draught. Sixteen days after admission she was seized with a convulsion, which commenced with a cry, and at once involved the left face and hand; the head and eyes deviated to the left; the pupils were equal, 6·5 mm., and inactive to light; when the fit passed off slight general rigidity remained, Next day another convulsion occurred, this time general; throughout the day slight twitchings were visible, and the mental state was coma of the usual type; the pupils remained equal, 7·5 mm.; the right reacted slightly, the left was inactive; retinal veins engorged and tortuous; some urine drawn by catheter was normal; from this time there was gradual failure of respiration, the lungs becoming œdematous; peptones were administered through the nose-tube, as she was unable to swallow. She died five days after the first convulsion.

Post-mortem examination.—The notes need only a brief summary, as they throw little light upon the case. Except for slight pallor and increase of subarachnoid fluid the brain appeared normal. There was no thickening of membranes, which stripped with normal difficulty; no opacity; no pink patches of congestion over surface of cortex; depth, colour and striation of the grey matter were normal. Ependyma of ventricles normal. No disease of larger arteries. No softening anywhere. Pons, medulla and cerebellum normal. Fresh sections of frontal, parietal, central and occipital cortex revealed some excess of pigment and granular degeneration of the deeper layers. There were patches of broncho-pneumonia scattered about the œdematous lungs. The kidneys were healthy, no loss of depth in cortex, no adhesion of capsule. All other organs normal.

SALE OF PUTRID FOOD.—On the 17th inst. the secretary of the London and Provincial Coöperative Supply (Limited), Edgware-road, was summoned before Mr. Hannay, at the instigation of the Marylebone Vestry, for exposing rabbits for sale which the presiding magistrate described as being absolutely green. Evidence being given showing that the sellers were cognisant of the condition of the food, the defendant was fined £20 and costs.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Hepatic Abscess bursting into Peritoneum treated by Incision and Flushing.—Radical Treatment of Severe Talipes Equino-varus in Children.

AN ordinary meeting of this Society was held on Nov. 22nd, the President, Sir Andrew Clark, in the chair.

Mr. HULKE gave the details of a case of Hepatic Abscess which burst into the Peritoneal Sac and which was treated by Incision and Flushing. The patient was a man aged thirty-five, who was under the care of Dr. J. L. Paul and himself. He presented a large liver abscess which three months previously had emptied through the lung and had burst later into the peritoneal sac—an accident marked by extreme collapse. On the second day after this event the peritoneal sac was opened, a very large quantity of pus evacuated, and the sac flushed out. After this the patient's desperate condition rapidly improved and he recovered, so that for several months he was able to resume his occupation. His recovery was, however, still incomplete, an abscess having again collected and been opened in July last. The case was offered to the notice of the Royal Medical and Chirurgical Society as an encouragement to the practice of promptly opening the peritoneal sac and flushing it out under like circumstances of the escape into it of the contents of an abscess.—Dr. GEORGE HARLEY said that this was the first case recorded, so far as he knew, of recovery after flushing the peritoneal sac for removal of pus due to rupture of a liver abscess. It was rare for such abscesses to burst into the peritoneum. Though usually deeply seated they worked outwards towards the liver convexity and burst there, refilling again and again, and usually rupturing into the pleura. He thought it would be better for the patient if they ruptured into the intestine, and probably many did burst in this direction, but they escaped recognition. He referred to a case of hepatic abscess of eleven years' duration which had burst six times—five times through the lung and once through the intestine. If they refilled, this occurred rapidly, giving rise to acute symptoms. Opening these abscesses, washing them out and draining them were no guarantees against refilling.—Mr. GODLEE said that a great extent of dulness upwards did not of necessity mean that the pus was in the pleura, and he referred to a case in which a hydatid of the liver was accompanied by dulness as high as the third rib, and it was treated as an empyema. In another case in which he made an incision through the lower ribs he found on introducing his finger that the abscess was subphrenic. If patients with these subphrenic abscesses lay on the left side the dulness was usually less than when standing up; it did not simply shift as in empyema. Rupture into the peritoneum was one of the rarest accidents to happen to these abscesses.—Mr. BARKER asked what was the temperature of the fluid used in washing out the abdomen. He had often noticed that flushing of the peritoneum was followed by an improvement in the patient's condition, but after a time, if the flushing was continued, this was succeeded by depression. He himself commonly used water at a temperature of about 108° F. Latterly he had used simply boiled, sterilised water, and he thought the results were better than when water mixed with germicides was used, as the latter imported a new element into the case. One advantage of the hot fluid was that it rapidly checked oozing. The two last cases in which he had employed flushing were those of children of tender age; in one two pints of pus and in one one pint were evacuated; they were not tubercular cases.—The PRESIDENT adverted to one case of abscess of the liver which had come under his notice in the London Hospital four years ago. There was a history of dysentery six months previously, after which the patient had never been well. On admission the signs were indefinite: there were loss of flesh and colour, a temperature of 100° F., a rather rapid pulse and morning sweats. The liver was rather smaller than normal and there was no point of tenderness over it or at the shoulder. Later a little friction developed at the lower part of the back. With a long and moderately small trocar inserted from the side he withdrew about twelve ounces of pus and the patient got better. Six weeks later he was again ill with rigors and sweats, elevation of temperature, rapid pulse and discomfort over the liver, which was not

enlarged. A surgeon who saw the case used a short trocar inserted from the front, and he found no pus. The patient died and a small abscess was found in the thick part of the right lobe of the liver.—Mr. HULKE, in reply, said that in the case related in the paper the pus had already burst through the pleura. He used the water so hot that he could just bear his hand in it. Though distilled water was good, some endosmosis of water into the surface cells of the peritoneum might occur, and a neutral saline solution was, perhaps, better for this reason.

Mr. EDMUND OWEN then read a paper on the Radical Treatment of severe Talipes Equino-varus in Children. He said that the orthodox treatment of severe club-foot by subcutaneous division of the tibial tendons and of the plantar fascia, and subsequently of the tendon of Achilles, left much to be desired. The tendon of Achilles should, in all cases of congenital talipes, be the first to be divided. In not a few cases of slight equino-varus its subcutaneous section sufficed in the way of actual operation, and in severe cases the amount of the inversion of the sole could be correctly estimated only after its section. Though subcutaneous surgery in general had doubtless played a useful part, it was at the present day more or less of an anachronism. It had been entirely superseded in the operative treatment of reducible inguinal hernia, and greatly to the advantage of ruptured persons; but subcutaneous operations were still generally performed for the cure of congenital club-foot. Operating thus, comparatively in anatomical darkness, the surgeon could not know for certain what structures he was dividing, nor could he be sure of severing certain important bands, deeply placed in the sole perhaps, which chiefly prevented his obtaining the perfect and easy rectification of the foot. Moreover, in a severe case of congenital club-foot, the skin itself offered a most serious impediment to a correction of the deformity. The operation recommended in this paper for adoption in severe cases of club-foot was that introduced by Dr. A. M. Phelps of New York. It consisted in dividing every resisting structure which was encountered in a free vertical incision passing from the dorsum of the foot into the depths of the sole over the head of the astragalus, the tendon of Achilles having been first cut. The improved position of the foot was thus obtained by lengthening the inner border of the foot rather than by shortening the external border, as was usually accomplished in tarsectomy. It consisted in inserting a broad wedge of space into the astragalo-scaphoid joint. This space was duly filled up with granulation tissue, which was eventually converted into a strong and trustworthy cicatricial band between the anterior and posterior segments of the foot. The treatment of the foot subsequently to the operation was simple and satisfactory, and relapse was far less likely to occur than after the old method of operating. Mr. Owen had for several years been carrying out this open method of treatment, and in a considerable number of severe cases of congenital talipes he expressed himself as highly pleased with it. Further, Dr. Phelps wrote to him to the effect that he (Dr. Phelps) had now carried it out in 200 cases with no fatal result, and with but a very small proportion of relapses.—Mr. ADAMS regarded the advocacy of the open method as a retrograde step. He himself still held to the method by subcutaneous puncture, which excluded the air and kept the wound free from after-inflammation. He thought there should be no difficulty in finding and dividing the various tendons and ligaments. He preferred to divide the Achilles tendon last.—Mr. BRODHURST agreed in the main with Mr. Adams, and said that after operating by the subcutaneous method he had never seen a relapse. He held that the skin did not interfere with the reduction of the deformity, and said he had never seen a case in which the bones were so deformed as to interfere with reduction.—Mr. HULKE pointed out that the subcutaneous method was a strictly antiseptic one, and therefore Mr. Adams' views were not so opposed to Mr. Owen's as might at first sight appear. Every surgeon in hospital practice must have seen cases of inveterate deformity in patients of a certain age in which some operation of the kind advocated on the bony framework of the foot was absolutely necessary to fit the parts for functional use. Hueter of Greifswald had proposed division of the neck of the astragalus, and Macewen and others had advocated operations on the bones. So long as these extreme instances of deformity were to be met with, so long must some method more radical than division of the tendons be adopted for treatment of them.—Mr. OWEN, in reply, said that of course this operation had not been proposed for ordinary cases of club-foot, but only for those in which subcutaneous surgery left so much to be desired. He maintained that the use of plaster was infinitely superior to Scarpa's shoe, and that bony deformity was common in cases of severe talipes equino-varus—a statement easily verified by the study of museum specimens.

MEDICAL SOCIETY OF LONDON.

Syphilis and Nervous Disease in Children.

AN ordinary meeting of this Society was held on Nov. 21st, Mr. Goodsall, Vice-President, in the chair.

Dr. W. B. HADDEN read a paper on the Bearings of Syphilis in respect of the Production of Nervous Diseases in Children. After alluding to the observations of Dr. Barlow and Dr. Judson Bury, "that nearly every variety of nervous affection of acquired syphilis has its parallel among congenital examples," as in part true, he passed on to consider the question whether syphilis was an important agent in the etiology of such infantile disorders as hemiplegia, posterior basal meningitis and sclerosis of the convolutions. In the absence of post-mortem proof, clinical evidence, however strong, must be received with reserve. He referred to Osler's work on the cerebral palsies of young children, and remarked that only one case out of 120 was ascribed to congenital syphilis, whereas Abercrombie mentioned four, if not six, out of a series of fifty.[1] Sachs and Petersen found two such cases out of a series of eighty-three. He reviewed other statistics of the same kind, and pointed out that the balance of opinion was in favour of syphilis being an important and a frequent cause. There were not many observations bearing on the condition of the vessels in congenital syphilis, but he thought arterial disease was probably less uncommon than was generally supposed. He pointed out that the majority of cases of hemiplegia in young children arose without any apparent cause; that syphilis was known to predispose to arterial changes in adults and occasionally also in children, and he insisted that a syphilitic history should be most carefully sought for. His own experience in this respect was based on the notes of forty cases, mostly at the Hospital for Sick Children, Great Ormond-street. Though he had no pathological experience to offer, his cases possessed a special value on account of their having been observed in very early life. He divided his cases into (1) those with an acute onset and (2) those without a definite onset. Many of the latter were probably congenital and dependent on mechanical conditions during pregnancy or delivery favouring intra-cranial hæmorrhage; others were probably associated with sclerosis of the convolutions. Many of the acute cases followed so closely on certain specific diseases—measles, diphtheria &c.—that a causal connexion might be reasonably assumed. In most, however, there was no apparent cause, the hemiplegia supervening on convulsions in children in apparent health. The commonest cause being thrombosis or hæmorrhage, the question resolved itself into the inquiry as to the causation of arterial degeneration. Up to three years of age embolism was rare, but after that it became comparatively frequent. In the cases of hemiplegia under consideration embolism might be practically excluded. With reference to syphilis he said that in twenty-five cases of hemiplegia having an acute onset no inquiry was made in three, there was no evidence in nine, in five there was a bare suspicion, in six there was a stronger history, and in two the presence of syphilis was undoubted. In discussing his cases he commented on the fact that in more than one the symptoms had supervened in children presumably syphilitic during a course of mercury, a fact which might be adduced as an argument against the specific origin of the lesions. He concluded by suggesting the following points for discussion:—1. Was there fair clinical evidence that infantile hemiplegia was often syphilitic? 2. Was arterial degeneration common in children, and what share had syphilis in its causation? 3. What share had syphilis in the causation of non-congenital idiocy? 4. Did syphilis act as a factor in the production of sclerosis of the convolutions in chronic meningitis? 5. Was mercury a constant and infallible therapeutic test in infantile syphilis?

Dr. ALTHAUS, after referring to the value of the triad of symptoms—the notched teeth, keratitis and median otitis—in the diagnosis of congenital syphilis, made some

[1] Brit. Med. Jour., June 18th, 1887.

remarks on the differentiation of this variety from the acquired disease in children. Although the hemiplegia might occur in children in apparent good health, a prolonged watching would rarely fail to be rewarded with the discovery of signs of syphilis. He agreed that mercury alone was often disappointing, but combined with iodide of potassium it gave exceedingly satisfactory results in these cases.

Mr. SHEILD remarked that the deafness in children was usually not due to otitis media, but a large majority of them had complete nerve deafness caused by an effusion into the tissues of the labyrinth and auditory nerve.

Dr. LEES said that, looking to the difficulty of proving the presence of syphilis, that affection might act more largely as a cause than could be actually demonstrated; yet, notwithstanding this, he did not believe that it was to a great extent provocative of infantile hemiplegia or of posterior basal meningitis; the latter might coexist with syphilis without being actually due to it, and he related a case in which he believed that this relation existed between the two. The fact that many of these cases did better on mercury and iodide of potassium than on any other combination of drugs did not prove that they were necessarily due to syphilis. He related two cases of gummata on the cranial nerves in children, one being in a little boy and the other in a girl aged thirteen. He referred to a third case in a boy aged eight, who had a paralytic affection of the lower limbs, and who at first was thought to have spinal caries, but the case ultimately turned out to be one of syphilitic cerebral fibrosis.

Dr. BARLOW said that he could recall about six cases of hemiplegia in congenital syphilis, in two of which necropsies were made. In one, a girl aged nine, who had been under observation for five years, there were all the signs of inherited syphilis; she had a convulsion, followed later by the development of hemiplegia, first on one side and then on the other, and she later passed into a state of hebetude. There was found extensive and typical syphilitic disease of all the arteries of the circle of Willis, with marked sclerosis of both hemispheres. He said that the rule was to get generalisation of the disease all over the nervous system—first convulsions, local or general, then hemiplegia, perhaps spasm on one side and palsy on the other, then choroiditis, interstitial keratitis, and finally idiocy. Such was the typical course of cerebro-spinal syphilis. The prognosis was always bad, though the symptoms might be relieved by iodide of potassium and mercury. The true basis of observation was morbid anatomy, and it should be remembered that every kind of lesion found in acquired syphilis was found also in the congenital affection, though the distribution was different.

Dr. WALTER CARR said he had made necropsies in six cases of posterior basal meningitis and in none of them was there evidence of congenital syphilis. He considered that the remarkable definiteness of the clinical symptoms and of the pathological lesions of that disease pointed to some definite but at present unknown etiology.

Dr. WHEATON thought that some of Dr. Hadden's cases might be instances of insular sclerosis, either syphilitic or not. He remarked on the prevalence of gummata in children, which were not generally recognised. He thought that one of the commonest lesions in children was an osteitis or necrosis of the bones of the skull. In some cases of hemiplegia with Jacksonian convulsions tubercle was found in the substance of the brain.

Dr. HADDEN, in a brief reply, admitted the necessity of further post-mortem evidence, and said that his experience of the presence of gummata was very limited.

Reviews and Notices of Books.

Vegetable Parasitical Diseases of the Skin. By Dr. D. C. DANIELSSEN. London: Sampson Low, Marston and Co. Bergen: C. Floor. 1892.

THIS is an atlas in large folio consisting of nine plates and seven woodcuts of the vegetable parasitic diseases of the skin, the text of which is written in Norwegian and English in parallel columns. Although complete in itself as far as the limited subject of which it treats is concerned, it really forms the fourth and fifth parts of the atlas of diseases of the skin commenced, by the author in conjunction with the late W. Boeck, many years ago; accordingly, the first plate of the present fasciculus is numbered Plate XIV. The plates of the previous parts represented Norwegian scabies of the palm and sole, psoriasis of the back, herpes ophthalmicus, of tertiary syphilis (five plates) and anæsthetic leprosy (five plates), and the text was in Norwegian and French. The present instalment, which we hope will not be the last, is welcome evidence that Dr. Danielssen's interest in the subject of diseases of the skin is unabated.

The plates in the present fasciculus comprise favus of the body with tinea tonsurans; favus of the limbs; favus of the scalp, with artificially inoculated favus of the arm in a herpetic form; tinea, or, as the author calls it, herpes tonsurans of the head and artificially inoculated tinea on the forearm; sycosis; pityriasis versicolor; very extensive tinea circinata of the whole trunk in complicated patterns, which he considers to be the same as the herpes tonsurans maculosus of Hebra. This latter is now generally acknowledged to be the pityriasis rosea of Gibert, while this plate apparently represents a true tinea circinata in concentric circles and of wide extent. The next is a plate of eczema impetiginosum traced to the staphylococcus pyogenes aureus and albus; and, finally, there is a plate comprising the microscopic appearances of the organisms previously treated of. The plates themselves, which have been executed at Bergen, are very fine specimens of chromo-lithography, and show well the advances that have been made in that process, since the first fasciculi were printed by the same firm some thirty years ago.

The explanatory letterpress is comprised in eighty pages, and is no mere perfunctory explanation of the plates, but contains a large amount of original matter recording experiments in inoculation of the various organisms. Among other results of Dr. Danielssen's observations, those on favus inoculation (which primarily produced vesicles, the characteristic favus crusts appearing later) are specially worth quoting, as he comes to the conclusion that they point to there being only one kind of favus fungus, in opposition to the cultivation experiments and deductions of Quincke, Elsenberg, Frank, Unna and others which he quotes. The text, indeed, is very interesting and well worth reading, though, like the bibliophile with the *édition de luxe* depicted by Du Maurier, owing to the enormous size of the pages, it is somewhat difficult to decide how to hold it for perusal. It is, however, well worth the extra trouble, and we can heartily congratulate both author and publisher on this handsome contribution to the knowledge of vegetable parasitic diseases.

Disease in Children. By JAMES CARMICHAEL, M.D., F.R.C.P. Edin. Edinburgh and London: Young J. Pentland. 1892.

THIS is the latest addition to the series of Pentland's "Students' Manuals." It will be observed that Dr. Carmichael prefers to call his work "Disease *in* Children" rather than "Diseases *of* Children," since he holds that, "with few exceptions, and those mainly of a congenital nature (malformations), we are dealing with the same diseases as in adult life, modified as they are by the conditions of growth and development going on in the child. It is not strictly correct to talk of diseases *of* children as we would of women, who suffer from ailments peculiarly their own. Disease *in* children must be studied on the same lines and by the same methods as disease in adults." This seems to us a just and necessary distinction. The chief difficulty in the way of a writer of a manual on the subject lies in the reception and rejection of material. He feels justified in assuming that the reader already possesses a fair acquaintance with some of the ordinary works on practice of medicine, and aims rather at emphasising those clinical features and therapeutic

problems which present themselves in the case of children. Hence many works on the subject touch very lightly on pathology, are incomplete regarding clinical details and can only be profitably studied by the student when he has been well grounded in the theory and practice of medicine. We have examined Dr. Carmichael's volume with care, and, as a work which, as he says, is "limited in extent and of a purely clinical character," we regard it as a very satisfactory performance. It would be difficult within the compass of rather less than 600 pages to give a more comprehensive, and yet succinct and practical, survey of the subject than that afforded by the author. The arrangement of the work is good, the information is accurate and well up to date, and the style is forcible and lucid. The diseases to which children are specially prone, such as pertussis, rickets, catarrhal pneumonia, rheumatism, chorea, pseudo-hypertrophic paralysis &c., receive adequate attention. The subject of treatment is considered very fully and the advice given is practical and judicious. No doubt, in a department such as this, where so many questions remain *sub judice*, exception might be taken to some of the author's recommendations. Thus, to take only one example, Dr. Carmichael seems to put considerable faith in diuretics for the cure of ascites—a sufficiently common but nevertheless probably erroneous view. He also recommends purgatives for this condition, whereas there is a growing opinion among the best authorities that they are usually injurious. We wonder what evidence Dr. Carmichael has for his assertion that "the so-called idiopathic ascites is common in children." We question this assertion very seriously. Still, we repeat, the author's views on treatment are in general sound and valuable. The writer is felicitous in some of his brief and pithy statements of knotty problems. It would be difficult to convey better in a single sentence what is known regarding the pathology of rheumatism than the following:—The rheumatic diathesis "indicates a liability under certain predisposing causes—such as exposure to cold and damp, associated with disorder of secondary digestion—to the evolution of definite morbid processes in the blood and sero-fibrous tissues which is termed rheumatism, the intimate pathology of which is still *sub judice*." The chapters on Nervous Diseases are full and comprehensive and include a good account of Friedreich's ataxia. The author devotes an appendix to the questions of food and medicines in general, and the modes of preparation of special articles of diet for the sick and the idiosyncrasies of children with regard to drugs are fully considered. The clear printing, freedom from printer's errors, good paper and tasteful binding of this volume are very creditable to the publisher.

OUR LIBRARY TABLE.

Guy's Hospital Reports, 1891. Edited by N. DAVIES-COLLEY, M.A., M.C., and W. HALE WHITE, M.D. Vol. XLVIII., being Vol. XXXIII. of the third series.—The first impulse of the member of the profession into whose hands this volume comes will be to search for the statistical report of the hospital. They will be anxious to know what cases, and in what number and variety, have been under treatment in the various departments of the hospital, and with what result. The feeling of disappointment at finding absolutely no "report" which can be called a *report* of the hospital will not be quite compensated for by the papers on various subjects by members of the staff, lecturers &c., however excellent, or by the list of specimens added to the pathological museum during the previous year, which is included in the volume. The contents of the volume include a paper by Dr. Hale White, on the Treatment of Chlorosis by Hydrochloric Acid, in which he comes to the conclusion that it will not cause more improvement than would be produced by rest in bed with good food. Dr. H. J. Campbell writes on some of the interesting pathological conditions met with in animals from the post-mortem room of the Zoological Gardens. He has also an interesting contribution on the Localisation of Phthisis to the Apex of the Lung, and accounts for the fact of its commencing so frequently in that situation by its being extra-thoracic, and therefore placed under unfavourable surroundings as compared with other parts of the organ. Dr. Silk contributes a paper on the True Lines of Advance in Anæsthetics. Dr. Beaven Rake, whose researches on the subject are well known, writes on some points in the Morbid Anatomy of Leprosy, as exemplified in the post-mortem examination of 109 cases under his care at the Leper Hospital, Trinidad. Dr. R. A. Bird gives his theory of the Origin and Spread of Variola. Dr. Frederick Taylor writes on Malignant Endocarditis, with cases; he also describes a case of Actinomycosis of the Liver and Lungs. Drs. Perry and Shaw give the results of their examination of fifty cases of Malignant Disease of the Stomach, with a short history of the cases and description of the specimens. The position occupied by the growths is illustrated in each instance by a diagram. Dr. Shaw also gives the list of preparations added to the museum during the year 1891, many of which are rare. The papers dealing with surgical subjects are few in number. Mr. Brailey contributes from the ophthalmic department a case of Pemphigus affecting the Conjunctiva; Mr. N. Davies-Colley a case of Ileo-colic Implantation followed by Resection of Portions of the Large and Small Intestine, for the Cure of Artificial Anus due to Gangrene after Strangulated Hernia. There is also a contribution by Messrs. Tubby and Manning from the physiological department, on the Properties of Pure Human Succus Entericus, with a few notes on Absorption by the Bowel and Intra-abdominal Pressure, based on the results of examination of Mr. Davies-Colley's patient. Mr. A. Parkin describes seven cases of Intra-spinal Hæmorrhage, in all of which the hæmorrhage was situated in the cervical region and was the consequence of injury. Papers are also included on the Volumetric Determination of Uric Acid in Urine, by Mr. F. Gowland Hopkins, and on a Form of Blood-pressure Manometer, by Dr. Starling and Mr. W. M. Bayliss.

The Asclepiad. Third Quarter, 1892. Vol. IX., No. 35.—The first paper in this interesting periodical, issued by Dr. B. W. Richardson, is the third of a series of lectures delivered twenty-two years ago on the Cause and Prevention of Death from Chloroform. This lecture deals with the modes of death and the measures of prevention of fatalities under the anæsthetic. Dr. Richardson says that death may take place in one of four ways—viz., (1) by apnœal syncope, (2) by epileptiform syncope, (3) by cardiac paralysis, and (4) by shock. His practical hints are sound and sensible, and it may be noted that he commends the administration of alcohol prior to the administration of chloroform, if only for its moral effect upon the patient. He adds to the lecture a commentary written this year upon a few points of importance, in which he expresses a preference for Junker's inhaler. This valuable paper is followed by the text of a "maiden speech in the French tongue," delivered by him on June 6th, 1892, at a banquet given by the Société Française d'Hygiène to the Sanitary Inspectors' Association. Amongst the "Opuscula Practica" in this number are some wise remarks on the golden rule of "do unto others" in the treatment of disease. The memoir of Sir Thomas Browne, the author of the "Religio Medici," is as interesting as any of the series which add such a charm to the *Asclepiad*, especially valuable as it is in the critical analysis of the famous book. A contribution to the subject of Vital Cohesion and a discussion of the Opium Question are amongst the remaining important articles of the number.

THE LANCET.

LONDON: SATURDAY, NOVEMBER 26, 1892.

EVEN a hasty glance at our report of the proceedings of the General Medical Council will show that its attention has been occupied by a variety of subjects of more or less interest to the profession and the public. The address of the President is generally a good guide to the main subjects of interest to be discussed in the course of the session. It was so in the case of Sir RICHARD QUAIN'S address on this occasion. Perhaps the subject to which he devoted most attention in his remarks was that of the illiberal legislation of foreign countries, notably that of France and Switzerland, in prohibiting the practice of medicine by foreigners, including Englishmen, in these countries, even when such practice is confined to cases of patients of their own nationality. It is sad to think that these restrictions, especially in Switzerland, are kept up mainly at the instance of the medical profession. Apart from this professional feeling, it is understood that the Federal Government would be willing to conclude with England an arrangement of reciprocity.

Sir RICHARD QUAIN spoke with feeling on this subject, and indicated that, in view of such jealous and narrow laws, English physicians should reconsider their practice of sending patients to great distances and inaccessible places, where most of all they may need the "special care of their best friends, English physicians," and where it is hard indeed if they cannot at least have medical attendants of their own nationality. We cannot believe that the republics of France and Switzerland will always display such want of liberality to the English profession, which has done so much to make the sanitary reputation of French and Swiss health resorts. After Sir RICHARD QUAIN'S address the Council proceeded with the details of its business. In connexion with the table showing the results of competition for commissions in the Medical Staff of the Army, the Director-General had informed the Registrar, in accordance with a request of the Medical Council, of four instances in which candidates were found to be deficient in the matter of correct spelling. The Council hopes, by tracing such defects to the bodies responsible for the preliminary education of such students, to stimulate these bodies to more care in the future. It transpired that the bodies responsible in these four cases were in one instance the Royal University of Ireland, in one the College of Preceptors, and in two the Royal College of Surgeons in Ireland. Sir JOHN BANKS and Professor MACNAMARA, with commendable promptitude, expressed their regret that their respective bodies had been at fault and their determination to bring the facts under the notice of these institutions.

Perhaps the most novel subject which has arisen so far in the course of business is the consideration of various documents in regard to Medical Aid Associations, and especially in respect of the nature and tendency of the relations of the medical officers of such associations to the members and to the general purposes of the associations. Our readers are by this time very familiar with the contention of Dr. LESLIE PHILLIPS that such associations are practically companies for carrying on medical practice, in which all the work falls on the medical officer and most of the profit accrues to the association; and that neither the interest of the public nor the dignity of the profession is served by medical men who accept the appointments. A huge petition signed by over 1000 practitioners showed that Dr. PHILLIPS is not alone in his contention, which, however, is flatly contradicted by the managers of the associations, who have made counter-statements to the Council. The Council exercised an admirable judgment in refusing to accept hastily any representations on the subject. They have appointed the following members as a committee—viz., Dr. GLOVER (chairman), Mr. WHEELHOUSE, Mr. TEALE, Dr. LEECH, Dr. BRUCE, and Dr. MACALISTER. The whole subject is to be referred to them. They are authorised to take evidence and, after fully sifting the matter, to report at the next session of the Council. The Council was liberal enough even to sanction in a negative sort of way the expenditure of £100 for shorthand writing and other unavoidable expenses, but added, with characteristic caution with regard to expenditure for any but its own immediate and routine purposes, that no more was to be incurred without the previous sanction of the Finance Committee. Sir WALTER FOSTER and Dr. GLOVER argued that the funds provided by the profession could not be better spent than in investigating a subject deeply affecting its interests and its honour, but they did not succeed in getting a larger grant. Doubtless, however, if there be any prospect of bringing about improved relations between the profession and the industrial classes in such a vital matter as their medical attendance on honourable terms, the Council or its Finance Committee will not hesitate to show its sympathy by some small increase of the sum. It is creditable to both sides that they seem anxious, without any question of payment, to give all the information in their power to the Council.

The Council did still more work on Tuesday. It resolved to apply the doctrine of the offence of "covering" to those on the Dental Register, as it has long done to those on the Medical Register. It is pretty clear that there is much need for this step and that much dental business is done by unqualified assistants, to the injury of the public and of honest dental practitioners. An important question was raised in the form of an amendment on the Standing Orders, recommended by the Executive Committee, and of which we shall probably hear more. The Council, as is well known, often restores names which, for sufficient reasons, it has seen fit to erase from the Registers. It has transpired lately that in some instances the bodies, from which the qualifications of the practitioners whose names have been so erased were derived, have absolutely withdrawn the qualifications, and that by their laws or charters they are unable to restore them without a fresh examination. This does not apply to all the bodies.

It might so happen that, in the case of a practitioner who originally possessed but one qualification which had been absolutely withdrawn by the body granting it, the Medical Council might order his name to be restored while he was entirely without the only qualification on the strength of which he was originally registered. This is a very awkward state of matters. The change in the Standing Orders will

tend to prevent haste in the action of the bodies; but some way should be found for harmonising such action with the action of the Medical Council, otherwise a practitioner, whose offence would be sufficiently met by his temporary removal, may be finally removed from the profession.

On Wednesday the Council had several painful cases to deal with under the disciplinary clauses of the Acts, particulars of which will be seen in our reports. We do not care to rejudge such cases, or to call in question the discretion of the Council; but we venture to say that none will accuse it of too much severity in any of the instances.

"SERIOUSLY, the safe side for the lay world to take is that which is against the vivisector. We shall not be absurd enough to say that no knowledge of value can be gained by such experiments." These words, used by one who is writing against "vivisection," appear to express also the sentiments of some of those outside the lay world who nevertheless wish to make for themselves friends therein. The anti-vivisection controversy has now passed beyond the initial stage, and the views that men hold and the parts they play have been made abundantly manifest in their various expositions and exhortations. This lay agitation has been carried on mainly in the columns of *The Times*, where have been set forth, in language the meaning of which could not possibly be misunderstood by the most obtuse of intellects, the arguments for and against experiments on animals. In the first instance, those who advocate experiments on animals were supposed to be on their defence, but as the discussion advanced it soon became evident that the "anti-vivisectionists" had put themselves in a false position through following the lead of those who were either remarkably careless or deplorably ignorant.

The position taken up by some of the "anti-vivisectionists" is that under no circumstances is experimentation on animals justifiable; but we venture to think that this position is not now generally accepted as being tenable. It is daily becoming more and more evident that the question to be determined is—how much good has been done, and how much information has been obtained, by experiments on living animals. Of course, even "anti-vivisectionists" disagree on this matter, but to Mr. LAWSON TAIT'S credit must be placed the fact that he has accepted this as being the real point at issue. He maintains that no great advance in medicine or surgery has been made which could not have been gained by clinical observation. It is quite conceivable that there may be a grain of truth in this statement, but let anyone attempt to calculate the enormous loss of life and the fearful amount of suffering that would necessarily have been involved in this slower process of gaining knowledge, and then let him put the question to himself whether it is not better that the lives of a number of the lower animals should be sacrificed, with the suffering in their case reduced to a minimum, than that a holocaust of human sufferers should be rendered necessary.

In this matter we ought to have advanced beyond the stage of mere recrimination, and even those who have spoken most strongly in favour of the total prohibition of experiments on animals are now in a sufficiently calm state of mind to go into it thoroughly and with as little bias as possible. The questions to be discussed are: 1. Are experiments on animals justified by the results obtained? 2. Are such experiments carried on under proper restrictions and by qualified and humane investigators in this country? To both these questions we can answer unhesitatingly in the affirmative. If, however, Mr. TAIT'S utterances are left unanswered the public might be allowed to remain under the misapprehension that those who advocate experiments on animals have put themselves beyond the pale of ordinary argument, and that it is a matter of supererogation at this period to affirm that experiments on animals are of the slightest use. In a letter to *The Times*, in answer to an article that appeared in the columns of that journal, Mr. TAIT, for example, sets forth several definite propositions to show that experiments upon animals are useless in enabling us to determine how the human organism will react. He, however, is extremely unfortunate in his examples. If no advances had been made as regards our knowledge of the circulation of the blood between the time of GALEN and that of CÆSALPINUS or SERVETUS, and if HARVEY by employing experimentation was able to set this question at rest, even allowing that he was not the discoverer of the circulation of the blood, and since he could not argue it out as Mr. TAIT would have done on the material offered by GALEN, was it not well that the period between that in which HARVEY carried on his experiments and obtained his results, and that when it could have been reasoned out by Mr. TAIT, should have been utilised in the study of more advanced problems of disease in connexion with the circulatory apparatus? Then, too, as regards the improvements made by JOHN HUNTER in the ligature of arteries in cases of aneurysm, most authorities will feel inclined to accept JOHN HUNTER'S statement, or rather the statement of Sir EVERARD HOME, his brother-in-law, as to the process of reasoning by which he was led to his method of treatment, in preference to any interpretation of his methods and arguments offered at this time of day by any critics, however able. In this matter it appears to us that JOHN HUNTER'S latter-day apologist has not been perfectly ingenuous, for Dr. HAYCRAFT has on more than one occasion supplied him in open meeting with chapter and verse (of which he has since made but scant use) from the works of JOHN HUNTER, proving that that writer was guided to his successful results through experiments on animals. The paragraph quoted by Dr. HAYCRAFT runs as follows: "The results of these experiments confirmed Mr. HUNTER in his opinion that the artery, in cases of aneurysm, is in a diseased state, and *led* [the italics are ours] him to believe that the disease often extends along the artery for some way from the sac, and that the cause of failure in the common operation arises from tying a diseased artery which is incapable of union in the time necessary for the separating of the ligature." Could anything be more definite or more convincing?

The references to VON GRAEFE'S work Mr. TAIT should never have made, as he confesses to his own comparative ignorance of diseases of the eye, whilst few people would have regarded him as one likely to accept a negative as evidence against a positive. Again, all who have heard Professor MACEWEN, or who have followed the accounts of his wonderfully successful operations on the brain, will know how deeply that surgeon feels himself indebted to the researches of those experimentalists who have worked at the

subject of localisation of function in the brain, and to Sir JOSEPH LISTER for his experimental work on antiseptics. The mind and skill of Professor MACEWEN might have been engaged in working out some such problems in their earlier stages had not so much of the ground been already cleared, so that his work of saving life and alleviating suffering could be directly entered on. Mr. GODLEE and Professor HORSLEY went a step further, and brain surgery to-day has become a recognised branch of the surgeon's work—a recognition it could not have obtained for years to come, and perhaps not for all time, had not experimentation on animals been resorted to. In Mr. TAIT'S own department of surgery we make bold to say that he now obtains results which could never have been compassed had not M. PASTEUR and Sir JOSEPH LISTER published their experimental researches; for, although Mr. TAIT criticises the details and methods of the antiseptic treatment, he, by his own showing and treatment, accepts the general principles worked out by these two great pioneers, and his patients recover and are not attacked by septicæmia or puerperal fever. We have now a knowledge of the conditions—by no means a perfect knowledge—under which these diseases are developed, and of the special conditions under which the etiological factors in these diseases can retain their vitality outside the body, under which they can invade the body and under which they are enabled to remain alive in the body; and whatever Mr. TAIT may think he daily avails himself of this knowledge. Anyone reading the dismal accounts of the outbreaks of hospital gangrene and of septic diseases generally recorded by Sir JAMES SIMPSON and others of the last generation of surgeons, or even of the older members of the present generation, and bearing in mind the tone of utter helplessness and hopelessness that runs through such accounts, cannot but be struck by the wonderful improvement in the statistics that are now at our disposal. Could Sir JAMES SIMPSON only come back amongst us what arguments would he not be able to adduce to help to convince us that we should look upon it as a duty to have recourse to any experiments on animals that could proffer promise of help to obtain results so different from those that surgeons in his time had to be content with.

As regards tuberculosis, it has been urged that because tuberculin has failed to give markedly satisfactory results when used in cases of tuberculosis, therefore KOCH'S experiments and investigation into the subject of tuberculosis have been of no value as regards the treatment of that disease. Could a greater mistake be made? The whole history of preventive medicine goes to show that not until the direct exciting cause of a disease had been found could any effective steps be taken to deal with the disease itself. Whatever KOCH has or has not done, he has obtained abundant evidence as to the part played by the tubercle bacillus in the etiology of tuberculosis. We have still much to learn about the saprophytic life history of this bacillus before we can attack it from every point, but we do not hesitate to say that there are already thousands of persons free from tuberculosis who would had they been born ten years earlier inevitably have been suffering from this disease. The increased precautions taken to disinfect the sputum of tuberculous patients and to avoid the use of milk from tuberculous animals may account for many of these thousands whilst better ventilation and better general hygienic conditions, the necessity for which was emphasised by the fact that the tubercle bacillus requires favourable conditions for its development, may be held responsible for the others. The causes of disease can only be completely studied by having recourse to experiments on animals. The main part of the work must necessarily, from the nature of the medical practitioner's occupation, be done by careful observation at the bedside, as his main duty is to relieve suffering at the time he is called in; but we maintain that, although it is the duty of every man to go carefully, reverently, and hopefully to work with an open mind to learn all he can from clinical observation, he must be prepared to have recourse to experiments in order that he may be able to fill in wide gaps or to make fresh excursions from the points already won.

Mr. TAIT is a keen, we might almost say an obstinate, controversialist but an able surgeon, and we hope ere long we may hear that he has re-read his evidence and has been convinced that there is some good in "vivisection." As regards the second question, even Mr. BERDOE acknowledges that English physiology is honourably distinguished from Continental physiology, in that experiments made in English laboratories are comparatively moderate and within bounds. Even with some added qualification there breathes a reasonableness in this statement that gives promise of better things to come. Every experiment must be reported to the Home Secretary in a most detailed fashion, and these reports are published annually. Every licensed place is most carefully inspected at irregular intervals, and the animals experimented upon, if kept alive after the effects of the anæsthetic have passed off, are subjected to most careful examination to ascertain whether there is any discomfort or pain. English physiologists are Englishmen, and they help to form a public opinion that has decided in favour of experiments on animals, but against all unnecessary cruelty.

AT the request of the Surbiton Improvement Commissioners the Surrey County Council deputed their medical officer of health, Dr. SEATON, to make inquiries into the health and sanitary condition of Surbiton. On Oct. 24th last Dr. SEATON submitted to the council the opinions he has arrived at as a result of his examination. It will be remembered that we appointed a Sanitary Commission to investigate the same subject, and that the report of this Commission was published in THE LANCET of July 16th of the present year. The system of intermittent pumping practised at the outfall sewage works, as a result of which it had been asserted that the air of Surbiton was at times offensive in the morning, was mentioned in our report, although our Commissioner was unable to confirm this statement during his visits. Dr. SEATON considers the present plan objectionable, chiefly because it allows sewage to stagnate for several hours in the sewers, and strongly recommends the substitution of continuous pumping at the works. He was, however, unable to detect any nuisance traceable to the present method, and was also able to satisfy himself that "the air in the sewer was travelling in the direction that might be expected, and with about the same gentle movement as in the daytime." The extremely well kept condition of the roads is also highly

commended. With the state of household sanitation Dr. SEATON'S report does not deal; but the county medical officer of health "certainly would advise the commissioners to make better arrangements for receiving and attending to any complaints that may be made about houses by medical men and householders, and to provide for the systematic inspection and registration of any lodging-houses, boarding-houses, schools" &c. Our report drew attention to several instances of insanitary houses erected since the passing of the Surbiton model by-laws in 1880, and noted the prevalence of cases of diphtheria (from the report of the medical officer of health) in numbers larger than those of any of the other acute specific diseases. This fact is also touched upon by Dr. SEATON, but not followed out further. Attention is directed to the report of THE LANCET "Special Commission on Sanitation in relation to the Law and Practice of House-letting," which appeared in our issue of August 20th last, and the importance of the matters discussed in this document is impressed upon leaseholders. In our report on the drainage of Surbiton it was pointed out that the offices of borough surveyor and inspector of nuisances were filled by the same person, a condition of affairs which Dr. SEATON thinks most undesirable, at the same time bearing testimony to the good work that has been done during the time that this arrangement has been followed. In conclusion Dr. SEATON remarks that, having given much attention to the system of voluntary registration or certification of houses, as practised at Eastbourne, he would be ready to report further upon the matter if desired by the Surbiton Commissioners. We note that the Surbiton sanitary authority will probably soon deal with some of the most important recommendations in Dr. SEATON'S report—e.g., the continuous pumping of sewage, the separation or not of the offices of borough surveyor and sanitary inspector, and the creation of the office of an expert sanitary official whose services shall be free to any resident in the district for the purposes of advice regarding household drainage and superintending alterations in drainage.

Annotations.

"Ne quid nimis."

THE DIFFUSION OF SMALL-POX.

THE diffusion of small-pox continues, although the extent of the several outbreaks is in most places not wide. In Warrington a third small-pox hospital is to be provided. It is to be hoped that it will not be near dwellings, for the two hospitals now in use have, it is to be feared, increased rather than decreased the extent of the epidemic by aerial diffusion of the infection. Since the visit of Mr. T. W. Thompson, medical inspector under the Local Government Board, a fresh impetus has been given to revaccination, and up to last week it was stated that out of some 400 attacks in Warrington no person revaccinated before having actually received the infection of small-pox had contracted the disease. Leicester, to which we refer elsewhere, has, we hope, got the disease for the moment under control; but cases of small-pox have occurred, both at Coventry and at Thame, in persons taking the infection at Leicester. In Leeds there is risk of a serious spread of the disease, and Dr. Cameron again urges the need of notification, for small-pox remains unknown to the authorities and is confused with chicken-pox. At Liverpool forty-one cases were under isolation last week. At Otley a temporary small-pox hospital is being hurriedly provided. At Chesterfield fifteen cases are under treatment in hospital, and the disease is stated to be on the increase. A number of attacks have occurred amongst navvies engaged in different works in several parts of the kingdom, and it is evident that a careful watch should be exercised over this class of labourers, and that every effort should be made to induce them to submit to revaccination. The main difficulty of this lies in the fact that they do not like to run the risk which is involved by reason of the nature of their work and its attendant physical exertion. Moss-side has small-pox due to labourers on the Manchester Ship Canal. Manchester itself has provided special pavilions at Monsall in order to check the disease. Cases are also heard of from other localities, such as Stamford, Featherstone, Bramley, Bradford, Oldham, Sheffield, Wakefield, Huddersfield, Halifax, Chadderton, Blackburn and Newport (Mon.).

AN OBSTRUCTIVE ADVERTISEMENT.

THOSE who are acquainted with London thoroughfares and the numberless impedimenta which beset them will not be surprised that a protest has been raised against the addition of one other obstacle to the tide of traffic. The presence of an omnibus used for advertising purposes only constitutes in the circumstances much too large a bid for public favour. Did it in any more practical way minister to public convenience objection might perhaps be silenced. Thus far it serves no other or higher purpose than that of a drifting handbill of the most massive and obstructive character. It comes as a mere lounger or street performer among the working craft of the streets. We need hardly wonder therefore if, with all its emblazonry of decoration, it is consigned to some quiet by-street, and assuredly we shall not regret to see it stranded outside the swift and swollen stream of public business.

THE THIRSK DISASTER.

THE inquest held by the coroner for the North Riding of Yorkshire upon the victims of the accident on the North-Eastern Railway has resulted in a curious verdict, in which the jury award blame upon principles which it is not easy to understand and grounds which do not at all appear in the report of the evidence taken before them. The directors of the company are censured in strong terms for a mishap which does not seem to have been in any way due to defective system or inefficient management, but to the failure of a signalman on the one hand and of an engine-driver on the other to perform the routine duties assigned to them—failures for which no sufficient excuse, and no excuse that is even forceful, can be put forward—failures, moreover, which are both duly recorded and denounced in the very comprehensive verdict of the jury. It is impossible not to feel that this verdict would have been very different if the erring signalman had not, in all that has happened since his unfortunate lapse, behaved in a most worthy manner. That strong sympathy should be felt with such a man in such a position is both natural and right, and we for our part would gladly confess that there is no occasion to grow angry with a man who has manifested such a just appreciation of his position and whose fault, however serious its consequences, seems to have been in itself a very venial one. But when a proper desire to show mercy in one direction leads to unjust criticism in another it is necessary even for sympathisers in the sentiment to protest against its extravagance and abuse. There is much to be said in favour of an eight

hours' night for signalmen, but it is both unfair and foolish to single out the directors of a particular railway and hold them up to opprobrium as "the persons really-responsible" for a lamentable mishap merely because, in common with many other railway authorities, they have sanctioned the employment of their signalmen for longer periods of time. We trust that a more discriminating temper will prevail in the public discussion of the lessons of the Thirsk accident, for it would be regrettable indeed if, from whatever the cause, the discussion were to degenerate into a bandying of random accusations and indignant rebuttals to which heedless charges made in such circumstances inevitably tend.

THE IRISH LOCAL GOVERNMENT BOARD AND CHOLERA PROSPECTS.

CIRCULARS have been issued by the Local Government Board of Ireland, entitled "Precautions against Cholera," in which all sanitary authorities are urged to utilise the present winter and spring in removing from their midst those conditions which are known to be identified with the diffusion of cholera. Vigilance as to water-supplies, sewers and drains and the like receives a prominent place in the circulars. The housing of the poorer classes is next dealt with, and then come a series of precautions which it is necessary to adopt in the case of persons already suffering from cholera, and also with a view to its prevention among the population generally. Appended to the document dealing with the latter subjects is a memorandum drawn up by the Royal College of Physicians of Ireland, containing a few practical hints for the healthy and some simple remedies for the sick. A second memorandum traces the course of cholera and refers to its prospects during 1893; it also deals with the demands that have been made as to the imposition of quarantine restrictions. The experience of England is referred to in this connexion, and the Irish public are finally told that it would be useless to place reliance upon any system of quarantine, or even to trust wholly to medical inspection of vessels entering ports. Under these circumstances the Board again urge both the sanitary authorities and the public to make their preparations in advance, so that they may not find themselves at an unexpected moment face to face with cholera spreading through insanitary conditions, and this without any ready means of defence against it. The circulars are signed by the secretariat of the Board, but it is evident that the excellent and well-timed advice which they embody emanates, in the main, from Sir F. MacCabe, the medical adviser to the Board.

SAD DEATH OF A SURGEON AT PECKHAM.

ON the 15th inst. Mr. G. P. Wyatt, coroner for the southern division of London, held an inquiry at the George and Dragon, Peckham, respecting the death of James Andrew Murray, aged thirty-two years, a surgeon, lately residing at 49, St. Mary's-road, Peckham, who had been found dead under circumstances of a very painful nature. Mrs. Albina Murray of Cork, Ireland, identified the body as being that of her son, who was a widower. The circumstances of this sad case are as melancholy as they well could be. From the evidence it is to be gathered that Mr. Murray's mind was to some extent unhinged owing to pecuniary and domestic troubles and excessive drinking; and that, in the opinion of those who knew him, he was a source of danger to himself at least, if not to others. It was not surprising therefore that steps were taken by someone to have his mental condition professionally inquired into. The cumbrous process of the law as to the certification of insanity in individuals was made evident at this stage, in so far as there had to be a sworn affidavit and information laid before the magistrate, who thereupon ordered a medical examination. The position and action of the relieving officer at this point became so anomalous that they called for a strong and unfavourable expression of opinion on the part of the coroner, with whom we fully concur. It is entirely wrong that it should be possible for a member of the community who has committed no overt act to be removed from his home as a lunatic by a minor lay official before any medical examination as to his mental condition has been made. A case of this sort does incalculable harm to the working of the Lunacy Acts, and accentuates the uneasiness of the public mind on the subject. No time ought to be lost in looking after a person whose mental condition renders him a source of danger to himself or to others; but the responsibility of action ought to be thrown as speedily as possible upon the shoulders of the medical authorities.

THE PURIFICATION OF THE THAMES.

IT is stated that steps are being taken to apply to Parliament in the coming session for an Act which shall make illegal the discharge of any sewage, purified or unpurified, into the Thames between Egham and the intakes of the London water companies. There is little doubt that sewage-contaminated water is frequently drawn from the river by the water companies, but the method of filtration, simple though it be, would appear to free it to a large extent from its objectionable organic impurities. But does mere sand filtration effect the removal of organisms? If, for example, the dejecta of a cholera patient were thrown into the river just above an intake, it is hardly conceivable that the ordinary process of filtration would render such contaminated water perfectly safe to drink. Evidence is very much wanted to clear up this point. Meanwhile the advisability of taking the course it is proposed to take will hardly be disputed, and, further, it is only reasonable to expect that the water companies should bear indirectly part of the cost of the outlay necessarily involved.

LEICESTER ISOLATION ARRANGEMENTS.

THE question of the provision of a new hospital for infectious diseases at Leicester is at a standstill, and we cannot but think that the refusal of the Town Council to come to any decisive conclusion is in part due to the fact that the chairman of the Sanitary Committee practically ignored, if he did not oppose, the protest of the Leicester Medical Society, who formally objected to the aggregation of small-pox cases on the site proposed, a site on which it is intended to receive other infectious fevers. Already small-pox has spread to other wards; indeed, Mr. Bremner's account to the Council of the diseases contracted by different patients in the existing hospital is such as to make us wonder how the place can be regarded as an "isolation" hospital at all. One thing is certain, and that is that the present hospital and its "quarantine" arrangements are utterly inadequate, and have failed in their professed purpose. It was admitted at the council meeting to be an ugly makeshift, a disgrace to the town, and to afford no proper means for the so-called quarantine system. This is what we always contended. But it is no reason why Leicester should remain idle. We admit that the question of site is all important, and this especially if small-pox is considered; and there is perhaps one advantage in the postponement of the question for the moment, for the delay will prevent any new attempt to deal with small-pox in the immediate future in such a way as to prevent the provision of such accommodation for the infectious fevers generally as a town like Leicester ought to possess. The existing site is already becoming surrounded by houses, building operations are likely to increase in its neighbourhood; and if it be a fact, as alleged by some members of the Council, that other and better sites are available, such alternative sites ought to be fairly considered

before a final decision is arrived at. In the meantime Leicester appears to be more free from small-pox than it was; but even its hospital seems to be associated with the mischief of spreading the disease, for one of the persons employed in the laundry, who under local teaching very naturally refused to be revaccinated, has died of small-pox. It is, however, astonishing to find that a town identified with the quarantining of persons exposed to infection—a system which, as one speaker put it, forms an "object lesson" to the country—should allow its small-pox hospital laundrymaids "to sleep in the town." If any one thing more than another shows the need for a new hospital, and for reform in the method of dealing with infection in Leicester, it is this disgraceful state of affairs. Hence we would suggest that no undue delay should occur in settling the vexed question of site for the new hospital.

THE OPENING OF THE NEW BRISTOL MEDICAL SCHOOL.

THE report we published last week of this function was, through an inadvertence on the part of the reporter, less complete than it should have been. In this way we undesignedly appeared to do an injustice to Dr. Swayne, whose services formed a prominent feature of the opening ceremony, and whose munificent donation should also have been mentioned. Before the principal part of the proceedings had commenced Dr. Swayne read an interesting address, in which the history of the school was traced, together with particulars of the professional career of his predecessors so far as their connexion with the Bristol school was concerned. Unfortunately, the name of Dr. Swayne was also accidentally omitted from the list of gentlemen to whom was entrusted the task of carrying out the whole of the arrangements connected with the dinner. We regret that this mistake should have occurred.

MUTILATION OF THE TEETH AMONGST SAVAGES.

DR. MAGITOT of Paris has published an interesting account of the mutilation of the teeth practised by various savage tribes. One variety, which is chiefly met with on the coasts of Africa and the west coast of New Guinea, consists of the breaking of a portion of the incisor by means of a knife and a piece of wood, and is performed between the ages of twenty and twenty-five. The custom of extracting the two central incisors is found in both hemispheres. According to Zerate it has been practised in Peru from time immemorial, where it is inflicted on conquered tribes as a sign of slavery. In Africa it has been observed on the Congo, among the Hottentots and the Batoxas. The mutilation by filing has for its exclusive centre the Malayan Archipelago, whence it has spread to the adjoining islands. It is a religious act, which is celebrated with great festivities at the age of puberty, but this only by the Mohammedans. The degree and character of this filing vary with the habits of the family or caste. The operation is performed by an expert, the *Tukang pangur* (filer), by means of a chisel, three bricks, two files, a small saw and a pair of cutting nippers, the instruments being rubbed with arsenic and lemon-juice before being used. It is the fashion amongst some tribes on the Senegal River to extract the upper temporary incisors in girls when quite young and to manipulate the chin, so that it is drawn forward and the lower incisors are made to protrude so as to overlap the upper lip, thus producing an artificial prognathism. In Indo-China and Japan a girl on her marriage paints her teeth with a black varnish. However, as this operation requires time and money, it is only practised by the wealthy class. Livingstone reported that among the Kafirs a child whose upper teeth erupted before the lower ones was regarded as a monster and killed. On the Upper Nile the negroes have their upper incisors extracted, in order to avoid being sold as slaves, because of the loss of value brought about by this mutilation. Among the Esquimaux, as described by the Abbé Peritat, in some regions there exists a custom of transversely cutting off the upper incisors, the object of this being, according to local tradition, to prevent the human chin looking like that of a dog.

THE ITALIAN ELECTIONS.

THE representation of the profession in the Italian Legislature remains almost exactly as it was before the electoral struggle, which has unseated so many old deputies and reinforced Signor Giolitti's Government with so many untried men. We note with gratification that Dr. Guido Baccelli retains his seat for one of the divisions of Rome with an overwhelming majority, and that his presence in the Chamber may still be counted on in the interests of public hygiene and medical education. A severe contest in the third electoral collegio (constituency) of Milan has resulted in the defeat of the advanced Liberal candidate, Dr. Malachia de Cristoforis, a medical consultant and sanitary reformer of the most enlightened and thorough-going stamp, whose well-inspired and outspoken advocacy of improved hygienic regulations for Milan, particularly for the minimising of zymotic disease, has been felt for good by every sojourner, migratory or resident, in that great *entrepôt* of foreign travel. More than once, when commenting on the small-pox and typhoid outbreaks that have emptied the Milanese hotels and driven the tourist public to select alternative and less convenient routes, we have had to acknowledge our indebtedness for facts and suggestions to Dr. De Cristoforis. We hope his exclusion from the Italian Legislature is only temporary. The Senate, on the other hand, has had its deliberative and debating resources distinctly reinforced by the elevation of more than one medical practitioner or investigator to its membership—the most conspicuous of these being the illustrious pathologist and sanitary reformer, Dr. Tommasi-Crudeli, whose researches and conclusions on malaria mark an epoch in our knowledge of the etiology and prophylaxis of that disease.

THE OUTBREAK OF CHOLERA AT LUCKNOW.

WHEN cholera extends in an epidemic form over a large district of country, or when an outbreak occurs in a large and densely populated city, it is often extremely difficult, if not impossible, to trace its progress and the causes and methods of its spread; but it is different when the outbreak is on an extremely small scale and circumscribed within very narrow limits of space and time. The conditions and all the circumstances attending it must then be well known, or should be capable of being accurately traced. A cholera outbreak of this kind has recently occurred at Lucknow among the officers of the Royal Artillery of that garrison, which seems to have been of a very sudden and unexpected character. It appears that a captain of the Royal Horse Artillery and the mess-sergeant were attacked on the morning of Oct. 19th, and that both died in a few hours. A subaltern of the 2nd Field Battery developed choleraic symptoms on the evening of the same day, and he was nursed during the night by another officer, who was attacked by cholera on the following morning and died on the same day. Two other subalterns were then attacked, but in their cases the attack was not fatal, nor was it fatal in the case of the officer of the 2nd Field Battery. We infer from the reports that all probably belonged to the same mess, and the question comes, how did the cholera-cause get into the mess house on Oct. 19th, and what were the exact local conditions of the mess at the time? No mention is made of any other attacks in the cantonments, or of the prevalence of the disease among the native population at Lucknow at the time. A special inquiry has been ordered into all the circumstances attending this outbreak,

which resulted in three deaths from cholera on Oct, 19th and 20th—viz., two officers, Captains Grierson and Head, and the artillery mess-sergeant. October is late in the season, we imagine, for the prevalence of cholera at Lucknow. It is the occurrence of sporadic cases out of due season, as it were, and sudden and unexpected outbreaks of this kind, the rest of the garrison remaining healthy, at stations far removed from the endemic area, that are so difficult to fit in with any of the existing theories of the disease. Some authorities in India regard such occurrences as the earliest indications of an epidemic which is to follow much later on—in the hot and rainy seasons of the following year, for example. The inquiry will no doubt be of a searching and exhaustive character.

STREET REPAIRS AND STREET OBSTRUCTION.

A REAL grievance has been exposed by a correspondent who recently noticed at some length the interruption of traffic in the Strand, which for several years has been practically unceasing, in consequence of repeated alterations in the roadway. Shopkeepers complain loudly of the loss of custom thus inflicted on them, and travellers of the delay in their journeys. We must also allow that the ever-giving ratepayer has no less ground for protest when we remember with what cold zeal, what multiplication of labouring effort, and consequent expense, the ordinary British workman surrenders the muscular equivalent of his wages. Of course no one would think of interfering with needful public works of improvement, or even of crippling the deserving efforts of private enterprise; all that we would ask for is that the disturbance referred to be justified by commensurate advantages and approved by some higher than any local authority, that due notice be given of intended alterations, that the matter be so arranged that the course of general business in the district shall not be injuriously diverted, and, finally, that the work be carried through with vigour and despatch. Such annoyance as that we have here briefly described is not limited to one street or one city. It is in greater or less degree the chronic pest of many chief thoroughfares. The particular means to be used for its cure must naturally vary with diverse local conditions. Its main excuse, however, must ever depend upon its necessity, and its temporary acceptance, even as a matter of submission, upon its compatibility with common interests.

THE FATAL "RUN" AT RUGBY.

THE distressing circumstances attending the recent death of a boy at Rugby School while taking part in a "run" are familiar to most of our readers. Notwithstanding that no actual blame for his death can be attributed to any one associated with the poor lad, it is impossible to overcome a certain feeling of uneasiness in connexion with the sad occurrence. No recognised precaution seems to have been omitted. Medical examination on two occasions had failed to reveal any sign of constitutional weakness. The boy himself had made no complaint of being ill. He had run several times before as far as he would have run on this occasion, and with apparent ease. Published details of the post-mortem examination are unfortunately very meagre, but the evidence thus obtained went to prove merely that death was due to syncope from overexertion. It is worthy of note that the run, though not longer than four miles was open to boys of all ages. This is a circumstance of more than trivial meaning. The pace, not the distance, in such a case constitutes the real difficulty, for, as everyone knows who has run in a paper-chase, the "hares" who lead it are chosen for their swiftness. A young boy, if ambitious to run well, as this boy was, does not use much care in regulating his own exertion. It is very doubtful that even if he felt unequal to the task he would care to acknowledge his unfitness. He would usually be only too ready to accept his present conditions, and to run when required to do so. Clearly, then, these must be regulated for him. To a large extent they are so regulated. No boy may run if declared physically unfit. Doubtful cases are submitted to the medical officer of the school. Little more may seem to be needful, but that little should not, in view of the recent accident, be disregarded. We would suggest that the positive test of a preliminary physical examination be required to qualify for these runs, and, further, that as a rule boys of a similar age be selected to compete together. The full advantage sought in this form of exercise, and rightly if it be well administered, would thus be obtained with a minimum of risk to those engaged in it, and the temptation to perilous and fruitless excess would be avoided.

THE ASSOCIATION OF FELLOWS OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

A MEETING of the committee of the Association of Fellows of the Royal College of Surgeons of England was held at 5 P.M. on Wednesday, Nov. 9th, at the residence of Mr. George Pollock, President of the Association. There was a very full attendance of members of the committee. The meeting had been called for the purpose of considering a reply to the last letter of the committee received from an official of the College, with reference to the points at issue between himself and the committee of the Association. A long discussion ensued with regard to the action to be taken, and, after various resolutions and modes of procedure had been suggested, it was ultimately agreed to appoint a subcommittee to draft a report in the form of a reply. It was agreed that the subcommittee should meet on the 14th and submit its report to the adjourned meeting of the committee to be held on the 16th, at 5.30 P.M. The committee then adjourned and met again at Mr. Pollock's residence on the date agreed upon. The reply drafted by the subcommittee was presented, considered clause by clause, amended and passed. The honorary secretary (Mr. H. Percy Dunn) was instructed to have the letter type-written, to sign it and despatch it in due course. He also laid upon the table the letter forwarded to Mr. Holmes by the secretary of the College in acknowledgment with thanks of the first resolution brought forward on behalf of the Association at the annual general meeting held at the College on Nov. 3rd. The honorary secretary was instructed to call a meeting of the committee immediately on the receipt of an answer from the official of the College referred to above. This concluded the business of the meeting and the committee adjourned.

PERIODATES IN CHOLERA.

THE full and circumstantial account of trials of the periodates in the treatment of cholera cases at Hamburg which appeared in *The Times* of Nov. 18th cannot fail to have attracted attention, but we do not think that the publication was happily chosen. We may say at once that a letter embodying these statements was sent to us, with a request for its insertion in THE LANCET, but we adhered to our rule to admit to our columns only subjects of treatment which come from duly qualified medical men. Details such as are given in the statement are hardly those which should be placed before the public eye at any time, much less when they deal with a new method the success of which can only be fully gauged after a thorough investigation by experts. The lamentable results upon the public mind of a similar publication a few years back of a new remedy for tuberculous diseases can hardly be forgotten, for the false hopes raised by it must be vivid in the memories of many people. Then, too, in the case of this recently vaunted remedy, it must be borne in mind that towards the close of an epidemic of cholera the type of the disease generally grows milder, and recoveries are in larger proportion under any plan of treat-

ment. The statements made as to several of the patients being rescued from a moribund state by the administration of periodates—the action of which can only depend on the readiness with which they give up free iodine—cannot obviously be criticised until they are properly endorsed by the responsible medical officers in charge of these patients. Without in the least objecting to the trial of any remedies that are likely to be of service in the treatment of this severe malady we must yet deprecate the drawing of too hasty conclusions, and, above all, of the presentation of facts as to the trial of such measures, except before a medical tribunal and with duly accredited medical authority. We prefer therefore to suspend judgment until the latter course is taken.

NOTIFICATION AT LEITH.

IT is startling to learn that in North and South Leith from Nov. 7th to Nov. 9th eighty-eight new cases of measles and twelve of scarlet fever occurred in one practice there, and that none of these cases were notified to the sanitary authority. We are not aware if measles is a notifiable disease at Leith, and there is still some general doubt as to the usefulness of its notification. But with regard to scarlet fever the case is different, and we cannot help thinking that the Leith authorities should take immediate cognisance of the alleged omission to notify the above-mentioned cases. Even with regard to measles, the health authority should know something about it, in order to take proper measures with regard to the closing of schools and exclusion of scholars.

THE ASYLUMS BOARD HOSPITALS.

THE hospitals of the Board continue to be abnormally full of fever cases. The number of patients in them on Nov. 12th showed an increase of sixty-four over those remaining at the end of the previous fortnight. The greatest number of admissions was at the Eastern Hospital (206) and the South-Eastern Hospital (202). Already there are more than 4000 cases isolated in the hospitals, including the two large convalescent institutions at Winchmore-hill and Gore Farm. In view of the energetic efforts which the Board is making to cope with the extra work it is hard to criticise closely the fact that a few cases here and there fail to get removed to hospitals.

TAKING THE OATH.

WE rejoice to see that the more cleanly mode of oath administration so often advocated in these columns has passed from the stage of discussion to that of practical application. We may remind our readers that Clause 5 of the Oaths Act, 1888, was framed on lines suggested by annotations which appeared in THE LANCET shortly before the passing of that Act. It was suggested that those who preferred to swear with uplifted hand instead of kissing the book should be permitted to do so. This more cleanly mode of adjuration has always been practised in Scotland and in the Channel Islands, but in no other part of the United Kingdom. Dr. Gordon Hogg, the newly elected coroner for the Western Division of Middlesex, has not only explained to jurors and witnesses that they can claim to be sworn with uplifted hand, but has strongly urged it as the more solemn method and as being free from any risk of infection, a by no means remote probability, seeing that *inter alia* jurors and witnesses must sometimes come from infected houses. Apart from this there is the objection which must always attend the handling and kissing of a book in indiscriminate use. Unless some movement is made by the presiding officials of courts of law this excellent clause of the Oaths Act must remain a dead letter. It ought to be extensively printed and posted on the walls of all courts, so that every juror, witness and person likely to be called upon to take an oath may be aware of the privilege which the Act confers. It may be taken for granted that very few would prefer to be sworn "on the book" if they were made aware that they have a choice in the matter. Dr. Gordon Hogg deserves the thanks of the profession and of the public for so courageously taking the matter in hand, and it is to be hoped that his example will be rapidly and generally followed by other coroners, magistrates and judges.

SMALL-POX CASES IN ISLINGTON.

MR. HARRIS, medical officer of health for Islington, with commendable promptitude on Monday last intimated to the medical practitioners of the parish the fact that in the last five days he had received notifications of twelve cases of small-pox within his district. We are glad to learn that up to the time of our going to press there are no further notifications. To be forewarned is to be forearmed. The public seem to be under some impression that this disease has changed its character. The profession is under no such delusion. Perhaps boards of guardians and other sanitary authorities will begin to wonder whether they have been doing their full duty in regard to the promotion of public vaccination.

INFECTIOUS DISEASE IN THE BOLTON RURAL DISTRICT.

IT is reported that no less than fifty-three cases of infectious disease were notified in the Bolton rural sanitary district during last October. Most of these were cases of scarlet fever and enteric fever, and occurred chiefly at Tong. The authority's hospital at Rumworth is said to be full, and it is stated that cases have had to go to the workhouse hospital. It is gratifying to know that the health officer has emphasised the necessity of further hospital accommodation being provided. This is all the more necessary inasmuch as small-pox is announced to have appeared in the town of Bolton, and a case of that disease has been already isolated in the borough fever hospital. Having regard to the definite appearance of small-pox in Yorkshire and Lancashire towns, particularly in Warrington, it is extremely important that all sanitary authorities in this part of England should be provided with means of isolating any cases that may arise. But it is equally important that these should be so placed and constructed as not to defeat the object of their existence by themselves becoming foci of small-pox infection.

TYPHUS FEVER IN DUNDEE.

A SMART epidemic of typhus fever is reported from Dundee. Already more than twenty cases of the disease are isolated in hospital there. Pending more precise inquiries, it is stated that the disease has originated from a quantity of rags belonging to hawkers, which were deposited (how is not stated) in a certain house. In the meantime every effort is being made to limit and localise the outbreak. With this view the health officer has very properly suggested the institution of a sort of "quarantine house," where all those who have been in contact with any patients suffering from typhus fever should be detained for a time. We shall look for further particulars of this Dundee outbreak at an early date, and should like to know if, as was the case at Wigan, the Irish quarter was the one principally affected.

FOREIGN UNIVERSITY INTELLIGENCE.

Algeria.—Dr. Brault has been appointed Lecturer on Surgery and Midwifery.

Ghent.—Dr. E. W. Eeman has been promoted to the ordinary professorship of Special Pathology and Therapeutics of Internal Diseases and of Laryngology, Otology and Rhinology.

Lille.—Dr. Bayrac of Lyons has been appointed to the post of Chief of the Department of Practical Chemistry.

Montpellier.—Dr. Ville has been appointed to the Professorship of Medical Chemistry.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.

THE deaths of the following distinguished members of the medical profession abroad have been announced:—Dr. Isidor Henriette, Professor of the Diseases of Children; Dr. Antonio Garcia Cabrera, Professor of Anatomy in the University of Granada; Dr. Paoli, General Councillor of Salice, Corsica; Dr. Pietro Pellizzari, Professor of Dermatology and Syphilography in the Florence School of Medicine; and Dr. Emilio Fasola, *privat-docent* in Midwifery in Florence.

THE Glasgow Police Commissioners have given an intimation that cases of small-pox have appeared in every district of the city. In the hope that a further spread of the disease may be checked, the commissioners urge upon the citizens the importance of protecting themselves and their dependents from the scourge by promptly securing the revaccination of every person above ten years of age. Arrangements have been made for free vaccination in the case of those who are unable to pay for the performance of the operation. The course adopted by the Glasgow Commissioners in respect of the prevalence of small-pox in the United Kingdom seems to have been followed at Warrington by the gratifying result of effectually checking the progress of the malady. A fortnight ago as many as seventy-one new cases of the disease were reported in one week; last week there were only twenty-nine fresh attacks announced, and it is expected that this week a still further diminution in the new cases will be noted

THE question of reform in the management and the registration of common lodging-houses has engaged the attention of the London County Council. The subject is of great importance, and one worthy of the prompt interference of the Legislature. It is satisfactory to find that as the result of an interview with the Home Secretary a deputation from the County Council received an assurance from the hon. gentleman of his complete sympathy with the object of the deputation, and of his desire to promote it by considering whether the control of lodging-houses could be carried out by the exercise of the Ministerial power of transfer under Section 10 of the Local Government Act, or would have to be effected by Act of Parliament.

AT a meeting of the Metropolitan Branch of the Incorporated Society of Medical Officers of Health, held on Nov. 17th, it was resolved, on the motion of Drs. T. Orme Dudfield and J. S. Bristowe, "that in the opinion of this meeting of metropolitan medical officers of health the permanent hospital accommodation of London for infectious diseases is insufficient and in the interests of the public health should be increased forthwith, and that copies of the above resolution be forwarded to the Metropolitan Asylums Board, the Local Government Board and the London County Council."

A MEETING of the Council of the Metropolitan Hospital Sunday Fund will be held at the Mansion House to-day (Friday), at three o'clock. The business of the meeting is to determine the report of the Council for the year 1892 and to order its publication; to revise the list of the Council for 1893; to order the convening of the next annual general meeting of constituents; and to consider what day of 1893 shall be recommended to the constituents for next Hospital Sunday.

SIR JAMES CRICHTON BROWNE, M.D., F.R.S., will this (Friday) evening preside at a dinner of the staff and past and present students of the National Dental Hospital and College and their friends. The festival will be held at the Royal Venetian Chamber of the Holborn Restaurant at 6 30 P.M.

THE Royal Commission on Vaccination assembled on the 23rd inst, Sir James Paget being in the chair. Dr. John McVail attended and gave evidence in favour of compulsory vaccination, quoting statistics to show the value of the operation as a preventive of small-pox. We understand that an interim report will shortly be submitted to Parliament.

THE second Grocers' Scholarship Lecture on the Physiology and Pathology of Blood Destruction will be delivered by Dr. William Hunter at the Examination Hall, Victoria Embankment, on Tuesday, the 29th inst., at 4 P.M.

THE Bradshaw Lecture will be delivered by Mr. Christopher Heath at the Royal College of Surgeons on Thursday next, Dec. 1st, at 4 P.M. The subject of the lecture will be Diseases of the Nose.

THE death is announced of Mr. Henry Whiting, M.R.C.S., L.S.A., of Haslemere. The deceased practitioner was for a number of years a medical adviser of the late Lord Tennyson.

THE Royal Microscopical Society will hold a conversazione in the Banqueting Saloon, St. James's Hall, on Wednesday, Nov. 30th, at 8 P.M.

THE death is announced of Dr. Axel Iversen, professor of surgery at the Communal Hospital, Copenhagen, on the 22nd inst.

BRIGADE-SURGEON HAMILTON, M.D., will read, on Dec. 5th, at the Medical Society of London, a paper on the Nature of Cholera.

THE GENERAL COUNCIL OF MEDICAL EDUCATION AND REGISTRATION.

THE winter sitting of the General Medical Council commenced on Monday, Sir Richard Quain, President, in the chair.

Mr. W. C. J. Miller, Registrar, presented the official notification of the appointment of David Caldwell McVail, M.B., as Crown nominee for Scotland, in room of the late Sir George H. B. Macleod.

Dr. P. Heron Watson formally introduced Dr. McVail to the President and the Council.

The President's Address.

The PRESIDENT then addressed the Council. He said: On this occasion, being the fifty-third session of the Council, we miss the presence of our esteemed colleague, the late Sir George Macleod. We miss his dignified presence, we shall miss his words, not too often spoken, but always wise, always expressed in a kind and conciliatory spirit, always helpful in the discharge of our duties. I am confident that there is no one of those whom I now address, and who has had the privilege of sitting as the colleague of Sir George Macleod, but will deeply lament his loss to us as well as to his many friends. His place will now be occupied by Dr. David Caldwell McVail, who is not quite a stranger to the Council, for he has been already our colleague from June, 1886, to April, 1888. I have every reason to anticipate that, following the example of his distinguished predecessor, Dr. McVail will be found a useful and acceptable member of our body. I do not propose to occupy valuable time by lengthened observations of my own. I am anxious, as

no doubt you are all likewise, that we should proceed at once to the discharge of the important duties assigned to us by law. Let me say that we must never forget what these duties are. They are, in the first instance, the promotion and advancement of medical education, so as to ensure for the public competent and well-qualified practitioners; and, in the second place, to take care that the Medical Register is not stained by retaining on its pages the names of those whose conduct is such as to render them unworthy to remain members of the medical profession. These, with the preparation of the national Pharmacopœia, are our duties. I mention them thus specially because demands are constantly made upon the Council to undertake other duties, which are not in accordance with those assigned to us by law, and with which we can have no relation. With reference to the several occurrences which we have to note since the last meeting of the Council, I have to mention that, in accordance with the resolution passed on May 25th last, I caused a statement to be prepared by the solicitor to the Council, with reference to the conditions under which foreign medical practitioners are allowed to practise in this country, with a view to procuring, if possible, a reciprocity of privileges for English practitioners desirous of practising amongst their own people abroad. This statement was submitted to the Lord President of the Council, who communicated it to the Foreign Secretary, with a request that it should be forwarded to the several foreign Governments. It will be seen in the programme that attention was specially given to the subject by the English ambassadors in France, in Italy and in Switzerland. The result seems to indicate that though there will be greater restrictions than hitherto on the practice of English medical men in France, still these restrictions may not prove very oppressive. In the kingdom of Italy it may be said that there is no restriction on English practitioners. With regard to Switzerland, the English representative at Berne writes to Lord Rosebery as follows:—"Although I shall lose no opportunity of urging on the Federal Government the justice of granting to British medical men in Switzerland the same privileges that Swiss practitioners enjoy in Great Britain, I cannot hold out to your lordship much hope of my being able to obtain a relaxation of the present rule, which renders it incumbent on British medical men who are desirous of practising in this country to obtain the Federal diploma by passing the regular medical examination. However well disposed the Federal Government may be to act in a liberal spirit and to conclude an arrangement of reciprocity, the Swiss Medical Board, which has a decisive voice in such matters, remains firm in its opposition to any idea of reciprocity arrangements with foreign countries." Thus English practitioners, to whom is especially due the recognition of the health resorts in Switzerland, are debarred by the action of their medical colleagues in that country from attending on patients whom they send to those almost inaccessible mountain regions, from which, in case of difficulty or danger, escape is nearly impossible, and where most of all they would need the special care of their best friends—their English physicians. It would really be well that we should bear these facts in mind in reference to Switzerland, and consider whether we should not send our patients to other lands, where they can obtain all essential climatic advantages, still enjoying the privilege of being attended by medical men of their own country; or might we not recommend voyages by sea, for which great facilities are now offered, and which in many instances possess advantages over those Swiss mountain valleys where the climate is often unsuitable and even hurtful in certain forms of disease? Nay, may we not frequently regard some of our own winter resorts with more favour? In accordance with instructions given to our solicitor for the purpose of obtaining information on the subject, Mr. Farrer has communicated with the authorities at the Home Office and the Metropolitan Police. Both have informed him that they will direct the reports of convictions for felony or misdemeanour of medical and dental practitioners to be communicated to the Council. A form of return, as requested, has been prepared and placed at the Home Office and at Scotland Yard. Several of these returns have been already sent in; some of them, however, relate to non-registered and non-qualified practitioners. In this incident there is, however, an advantage, inasmuch as the authorities will have an opportunity of discovering the false statements of individuals who assume the rank of qualified medical practitioners to which they have no claim. The visitation and inspection of examinations have been made in the case of the Irish universities and the Scottish corporations. The reports on these visitations have been forwarded to the several medical authorities concerned, and their comments thereon, together with the reports, will be placed in the hands of the Committee on Education when received. Arrangements are in progress for the visitation next year of the medical corporations in Ireland and some of the English universities, and several of these visitations will be completed before the meeting of the Council in May next. In accordance with the resolution of the Council on the subject of "covering" by dentists, which was referred to the solicitor with a request that, after communicating with the Dental Association, he should report to the executive committee at the present meeting, the solicitor has presented a report to the effect that it seems to him as much a duty of the Council to protect the public in the matter of dentistry as in medical practice. He advises the Council to issue a warning to dentists, through the medium of the British Dental Association, who are willing to undertake the duty, similar to that conveyed by means of a minute of the Council to medical practitioners before taking more decided action in regard to the offenders. I cannot conclude these few observations without remarking that year by year the duties devolving on the Council become more and more definite, more and more important and lead to more decided practical results. I can well understand that in the early and difficult days of the existence of our Council the duties were unfamiliar to many of its distinguished members, and that they found considerable difficulty in formulating and surmounting some of them. Then, too, it was thought and expected from the outside that much more could be accomplished by the Council than it had authority for doing. It is now recognised—and it is my hope that it will be more and more recognised every year—that the Council is doing all in its power to secure the higher education of the profession and to elevate and maintain its character in all that is essential in connexion with the welfare of the public within the lines marked down for us by Parliament. I can recognise that this Council, which I can better understand in my present position, composed as it is of the representatives from the great teaching and licensing authorities of the country, of representatives of the Crown and of representatives elected by the profession at large, should be, and is, a body well constituted to perform these important duties. In some other countries these duties devolve on Government officials; happily here they are placed in our own hands, and I am confident that we shall not fail to prove worthy of the trust thus reposed in us.

On the motion of Sir JOHN SIMON, seconded by Sir WALTER FOSTER, M.P., a vote of thanks was passed to the President for his address.

Business Committee.

Mr. Wheelhouse (chairman), Sir William Turner and Mr. Bryant were appointed the business committee, to continue in office for one year from the present date.

The Arrangement of the Programme.

Sir JOHN SIMON, raising a point of order, said that when he received the provisional programme he observed on it, as a remnant from last session, a notice of motion to be proposed by himself and seconded by Sir Dyce Duckworth, relating to proceedings taken in this Council. But when he got the programme that day he saw the notice of motion was absent, and he received at the same time a note from the Registrar stating "that certain documents and resolutions, proposed to be laid before the Council, are withdrawn on the advice of the solicitor, because they referred to a cause now pending in the courts of law." That was a resolution of the Executive Committee. Might he ask what these documents were? He was not aware that they referred to a case pending in the courts of law in regard to any proceedings in this Council, and in the interest of members he expressed his dissent from the view that the Executive Committee was at liberty in this offhand manner to suppress that notice of motion. Again, on turning to the minutes of the Executive Committee, he found no notice taken of the resolution.

The PRESIDENT said the resolution in question was come to on the previous day, and to his mind it was impossible for them to act otherwise. They could not separate Sir John Simon's resolution from other documents which followed, and if it were printed and discussed all must be discussed.

Sir WILLIAM TURNER said the Executive Committee considered the matter with great care. The solicitor spoke without the slightest hesitation and put it as strongly as this—that if this question were discussed by the Medical Council he felt it would be tantamount to a contempt of court.

The committee felt that they could not fly in the face of the very decided opinion given by their solicitor.

After some further discussion it was resolved to record the resolution in question on the minutes of the Executive Committee, and the subject dropped.

Examinations for the Army Medical Staff.

A table was received showing the results of the competition for commissions in the medical staff of the army in August last. It appeared from the document that the total number who presented themselves was 43. Of these, 20 passed for vacancies, 10 qualified, but were unsuccessful; 13 were rejected, 13 were deficient in medicine and 9 in chemistry and drugs. The Director-General of the Army Medical Department informed the Registrar that four candidates were deficient in spelling.

The REGISTRAR, in response to a request for the information, said that one of the four candidates passed the matriculation examination of the Royal University of Ireland, one the examination of the College of Preceptors in London, and two the preliminary examination of the Royal College of Surgeons in Ireland.

Sir W. FOSTER, M.P., moved that these bodies have a letter sent to them by the Registrar calling attention to the fact.

Mr. MACNAMARA seconded the motion. He considered it one of the most important duties they had to see that the preliminary examinations were kept up to the mark. He regretted very much that two of these gentlemen passed the preliminary examination of the College he represented, and he would be only too pleased to have an intimation from the Council conveyed to them in an authoritative manner. The College of Preceptors—a body which had been tried to be thrust down their throats there on several occasions—had also fallen short in its preliminary examinations. But it must not be thought there had been an all-round failure on the part of the candidates. It was in spelling, and he knew one of the most distinguished members of the English bar who, when he wrote a letter, was obliged to have a dictionary beside him to prevent mistakes in spelling.

Sir J. BANKS said the preliminary examination of the Royal University of Ireland was second to none, and he could not understand how one of these four men passed it, and he regretted it extremely.

The motion was agreed to.

Dr. HEBON WATSON moved that the thanks of the Council be given to the Director-General of the Army Medical Department for his kindness in sending this return, and also in giving the information about the spelling.

Dr. BRUCE seconded the motion, which was agreed to.

Medical Aid Associations.

The next business was to receive communications from the Medical Defence Union and the Gloucester Friendly Societies' Medical Association in regard to medical aid associations. Both were long documents. That of the Medical Defence Union, written by Dr. Leslie Phillips, the secretary, was accompanied by some printed official reports of several medical aid associations in various parts of the country, which, he said, would sufficiently substantiate what he presented in the way of argument, and would reveal the condition of servitude to which the system carried out by medical aid associations had reduced many honourable members of the profession, who only sought the opportunity to escape from the thraldom into which they had drifted or been driven by stress of circumstances. The condition of affairs was alike derogatory to the honour of the profession and injurious to the best interests of the public. A medical aid association was a business generally formed by the amalgamation of the existing medical clubs in any particular town. Having once amalgamated into a medical aid association they threw open their doors directly or indirectly to any and every comer. But brief consideration, declared Dr. Phillips, was needful to see that the system of these associations was a sweating one. The skill, industry and labour of medical men were made use of to accumulate wealth for what was no more nor less than a trading company. The medical man was reduced to a condition of servitude; he was paid a miserable pittance; the greater proportion of his earnings was taken by the proprietors, not only to pay fees but to accumulate assets; the right to freely practise his profession was denied him, or only allowed on consideration that his earnings were divided between himself and his masters. Many, if not most, of these aids did not confine their sphere of operations to these *bonâ-fide* members of the amalgamated clubs, but practically carried on private and general practice among all comers, not so much for the benefit of the medical officer as for their own emolument. They were, in other words, large unqualified corporations, carrying on medical practice under cover of one or two medical officers, to the destruction of the interests of the resident practitioners of the town. Another way of viewing the same thing was that the surgeon actually paid a tax upon his industry. Many of the associations were good enough to permit their medical officer to attend midwifery cases, but, in consideration of their kindness, they required that a part of the fee should be paid into the exchequer of the association for the benefit of its general funds. Each year the formation of medical aid associations was increasing more and more, and a definite disclosure of policy on the part of the Medical Council would serve not only to bring about a better understanding between the existing associations and their medical officers, but would prevent the extension of what all fair-minded men, both professional and lay, must regard as an iniquitous system. It appeared to him that it was not essential for any public inquiry to be made in this matter. Recent events and investigations had convinced him that a potent remedy would be a clear and unambiguous note of warning addressed by the Council to the medical profession, and especially to those associated with these medical aids. He suggested that a practical solution of this grave question, even if the Council did not see its way to declare it infamous in a professional respect for a medical man to engage himself to exclusively practise for and on behalf of a medical aid association, foregoing the right to privately practise his profession, or submitting to division of profits resulting therefrom, would be for the Council to declare it to be conduct infamous in a professional respect for any medical man to hold the office of medical officer to a medical aid association save and except under the same rules and usages as ordinary club appointments were held by the resident medical men in any particular town. The communication from the Gloucestershire Friendly Societies' Medical Association denied the charges contained in the letter from the Medical Defence Union, and defended the methods adopted by these associations, which, it was explained, owed their origin to a desire to remedy the abuses which accompanied the old club system, and which, it was declared, an impartial inquiry would show to be free from the evils alleged against them.

Mr. WHEELHOUSE moved: "That the General Council approach the consideration of the question of medical aid associations, and the evils said to be attendant upon them, by referring the whole subject to a committee authorised to take evidence, and after fully sifting the matter to report at the next session of the Council, the committee to consist of the following six members: Dr. Glover (chairman), Mr. Wheelhouse, Mr. Teale, Dr. Macalister, Dr. Leech and Dr. Bruce." He asked that this method of dealing with a very large question be adopted by the Council, because he felt that if they were to come to an immediate decision on a question of so much moment—a question which had agitated the profession throughout the country—they might very likely be guilty of hasty legislation on the subject. By means of a committee all parties would have their views fully presented and considered before the Council was asked to come to any decision on the matter. He asked for the purpose that the committee should be authorised to sift the matter really to the bottom, and be empowered to take evidence if necessary and to receive information from whatever quarter it might seem desirable.

Sir W. FOSTER, M.P., seconded the motion.

Dr. HAUGHTON said he felt extremely thankful that the name of no Irishman appeared on this proposed committee. There were five Englishmen and one Scotchman, and he hoped Dr. Bruce was pleased with the company he was in. This was a testimony which was gratifying to his (Dr. Haughton's) innermost heart of hearts as an Irishman that this disgraceful process of sweating medical practitioners did not exist on the other side of St. George's Channel. He felt so strongly upon this matter that he was prepared to vote that this practice was infamous in a professional point of view, and he hoped that the result of the committee would be to ask him for his vote in that direction.

Sir JOHN SIMON thought that the question of whether the public suffered by this practice ought to be considered; and if they found that injury was inflicted on the public by it, clearly it was within the province of the Council to deal with it. As regards the other questions, however, he was of opinion that they were questions for the British Medical Association and other medical associations to deal with.

Dr. GLOVER thought the Council would be entirely right in taking the course proposed of first examining the facts of the case. He wished to know whether the committee would be entitled to ask the assistance of the solicitor of the Council, as that seemed to be a very important matter.

The PRESIDENT: Certainly.

Sir W. TURNER asked if it was to be understood that the expression in the motion "authorised to take evidence" was intended to give authority to the committee to call persons before it.

Dr. GLOVER: I should distinctly be in favour of examining in person.

Sir W. TURNER observed that, though this might seem a very simple matter on the surface, there was something very important below. There was the question of expense. If they were to take evidence it must be presented to the Council in such a way that the members might sift it before coming to an ultimate decision. Was the evidence to be taken down in shorthand and then extended, and if so, who was to pay the cost? If the motion were to be read as Dr. Glover obviously read it, he hardly thought the question of the cost had been sufficiently considered. If they were to have evidence in this way the Council, he presumed, must bear the cost.

Dr. GLOVER had no hesitation in saying that this was an expense that the Council should willingly and cheerfully accept. He could not imagine a more useful purpose to which to apply some of their surplus than in providing a complete account of the evidence before the committee. But he did not anticipate that it would be necessary to examine many witnesses.

Sir W. FOSTER, M.P., regretted very much that the question should have been approached from an economic point of view with regard to the funds of the Council. They had before them a very grave complaint made on behalf of the general body of the profession, from whom the funds of the Council came. They complained, first of all, that this system was demoralising; and, secondly, that it was more or less injurious to public health, by bringing about a defective method of the practice of the profession. Those were two very grave accusations and they stretched over so wide a field that if they were to take notice of the matter at all it should not be in any spirit of haste or carping economy, but they must be prepared to go into the whole subject deliberately and sift it to the very bottom in order to arrive at a wise conclusion that would not be easily upset. If it were necessary that the inquiry should cost £1000, he thought they could not spend the money better than for the benefit of those who found it. He hoped therefore there would be no more objection to the proposal on financial grounds.

Sir JOHN SIMON had great doubts about the desirability of the committee at all, but if they were to have an inquiry and the committee found it necessary to incur expense, it should be a limited expense under the direction of the Executive Committee.

Dr. HERON WATSON pointed out that in addition to the cost of reporting the evidence there would be the expense of bringing witnesses to London. He asked whether the members of the committee were to be paid their expenses while sitting. Was the expense, whether £1000 or £2000, to be paid by the General Council or by the English Branch Council? It seemed to him that this was a question confined wholly to England. In Scotland, happily, they knew nothing of it, nor did they in Ireland, and he did not see why the Irish and the Scotch branches of the Council should be charged with any of the expense.

Dr. GLOVER said it happened that the English public and the profession in England were the sufferers, but they should have to know more than they did now before they could say that Scotch practitioners were entirely free from blame in this matter. He hoped the Council would not prejudge any aspect of the question and would insist on the power of the committee to take evidence. If it had not that power it should not be appointed. He had no reason to suppose that medical witnesses would be unwilling to come even at their own charges, and he believed the representatives of the friendly societies would be willing also.

Dr. HERON WATSON asked whether the members of the committee would be paid.

Dr. GLOVER: I do not wish to be paid.

Dr. HERON WATSON said he should like to hear that from every member of the committee

Sir W. TURNER said there must be a limit to the expense.

Mr. MACNAMARA could not see the necessity for any great or searching inquiry. It was the principle which had to be considered, and he thought they had discussed the matter sufficiently to enable them to come to a decision. They would not be in a better position to enter on the question when the committee reported.

Mr. WHEELHOUSE said the authority to take evidence was desired for the purpose of supplementing written evidence, if the committee should think it necessary to verify statements in such documents by means of cross-examination. He never entertained any desire to be paid for his services on the committee, and he believed that was the feeling of all his colleagues.

After some further discussion,

Sir DYCE DUCKWORTH moved and Sir W. TURNER seconded the following rider: "But that the committee do not incur expenditure beyond £100, without the previous sanction of the Finance Committee."

Sir W. FOSTER, M.P., did not think that was treating the committee with any great confidence. However, as he was not a member of the committee, he did not care to resent it, and, if Mr. Wheelhouse agreed to the addition, he made no objection.

Sir W. TURNER said it was not a question of confidence in the committee, it was purely a business matter.

The proposal of Sir Dyce Duckworth having been accepted by Mr. Wheelhouse, the motion as amended was then agreed to.

Midwifery Diplomas.

The next business was a memorial from Dr. R. R. Rentoul with regard to the action of those registered medical practitioners who have formed schools of midwifery and examining bodies granting diplomas for the practice of midwifery, and praying that the Council would consider the making of a rule restraining such action on the part of these practitioners as being contrary to the Medical Acts.

Mr. WHEELHOUSE explained that Dr. Rentoul had presented two documents, one with the memorial and the other containing a large amount of evidence which had been brought together by Dr. Rentoul with regard to the memorial. He hoped the Council would take the memorial into consideration, because the question with which it dealt was one which was agitating the profession very profoundly indeed. He had letters before him from members of the profession entreating him, as one of the direct representatives, to use his best endeavours to have the matter considered by the Council. It was considered that the certificates given by those persons who undertook to examine women in midwifery questions were practically diplomas. They stated upon the face of them that the holders had been examined and that they were found competent to attend midwifery cases. They were used as diplomas all over the kingdom, and it was in order that the rights of the medical men on the one hand and those of the public on the other should be considered that Dr. Rentoul was agitating in the matter. He (Dr. Rentoul) said that the law demanded that those who practised midwifery should also have been educated and examined in medicine and surgery, and that unless they had been so educated and examined they could not be said to be competent to practise any one of the three branches. Indeed, he went so far as to say that if certain bodies were to be allowed to give certificates that persons were competent to practise midwifery, might not other combinations of medical men give certificates that they had examined persons in surgery and medicine, and certify that those persons were fit and competent to practise those branches? Dr. Rentoul appealed to the Council to put a stop to a practice on the supposition that it was detrimental to the profession and the public that those persons should be authorised to practise only one branch out of three which the law said they should be instructed in, but he forgot that the duty of the Council was only to see that such persons were not entered upon the Medical Register. If the Council were guilty of permitting any one of those persons to enter the Medical Register, then there would be cause for complaint. In the meantime, however, Dr. Rentoul entreated the Council to consider the question of the propriety of any body such as the London Obstetrical Society issuing certificates in the form of diplomas stating that it had examined and certified certain women as fit to practise midwifery. If the certificate could be so altered as to show that the women had been educated and examined and were certified to be capable obstetric nurses then he (Mr. Wheelhouse) thought the whole question would subside at once. He moved that the memorial be printed in the minutes of the Council.

Dr. ATTHILL seconded the motion.

Sir WILLIAM TURNER pointed out what he regarded as a

fundamental error in Dr. Rentoul's case. The certificates in question had no legal value; they were simply an expression of opinion on the part of one or more individuals.

After some further discussion, the motion was agreed to.

Application for Restoration.

Mr. DAVID HYMAN DYTE petitioned for restoration to the Medical Register, from which he was removed in May of the present year. The Executive Committee recommended the Council to grant the petition; but after considering the matter in private for some time the Council decided not to do so.

The University of Bombay.

The Executive Committee reported that an Order in Council applying Part II. of the Medical Act (1886) to India having been received from the Privy Council Office, they had considered an application from the University of Bombay requesting the recognition of the degrees in Medicine and Surgery of that University and their registration in the Colonial Register, under Section 13 of the Medical Act (1886), and on Nov. 21st, 1892, passed the following resolution, viz.: "(1) That this application be acceded to so far as appertains to graduates of the University of Bombay who commenced the study of Medicine prior to Jan. 1st, 1892, but that the Executive Committee would call the attention of the University of Bombay to the recent regulations of the General Medical Council, which require that candidates who commence the study of Medicine after the above date should be engaged in professional study for five years; (2) that the recognition of these degrees of the University of Bombay be reported to the General Council."

Dr. HAUGHTON protested against the recognition of these degrees.

Mr. BRUDENELL CARTER asked the registrar whether in this matter the Executive Committee had not done something which was well within their powers.

Mr. MILLER replied that certainly this was the case. By resolution of the Council the Executive Committee were empowered to take the necessary steps for carrying into effect the clauses of the Medical Act of 1886 relating to the registration of the diplomas of colonial and foreign practitioners, and were instructed to report their proceedings to the Council from time to time.

Dr. HAUGHTON: Then all I have to say is that this Council has entrusted to the Executive Committee a task which they are incompetent to discharge.

Covering by Dentists.

The next business was a report by Mr. F. W. FARRER, the solicitor of the Council, with reference to the statement submitted to the Executive Committee by the British Dental Association. Mr. Farrer explained in this report that the statement of the Association mentioned fourteen cases of covering by dentists of such a character as would, if proved against a medical practitioner, involve the removal of his name from the Register. It seemed to him to be as much the duty of the Council to protect the public in the matter of dentistry as in that of medical practice. The Executive Committee would, however, recollect with what care the Council proceeded in the case of medical practitioners, what years of warning it gave them, how it promulgated a minute upon the subject and took the utmost pains to convey the minute to every medical practitioner, and how several cases were tried and practitioners warned before any name was taken off the Medical Register for the offence of covering. He would advise the Council to issue a similar warning to dentists, and to cause such warning to be conveyed to every dentist on the register through the British Dental Association, who had expressed their readiness to undertake the task. Looking to the position of a very large number of dentists and to the mode in which they had been in the habit of practising, he thought that covering in their case should be dealt with even more cautiously, if possible, than it was dealt with in the case of practitioners on the General Medical Register.

Sir W. FOSTER moved that the solicitor be directed to prepare a draft warning to registered dentists against the employment of unqualified assistants analogous to that given to registered medical practitioners on April 21st, 1888, and that the draft warning be submitted to the Council. The duty of the Council, he said, was to give all the help they could to the dental profession in putting down what was an illegal and undesirable practice.

Dr. GLOVER, in seconding the motion, said he was very glad that the Council had come to see the propriety of extending the same principle as to covering to the dental profession as they had extended to the medical practitioner.

The motion was agreed to, and it was arranged that the draft warning should be submitted to the Council before the close of the present meeting.

Proposed Amendment of the Standing Orders.

A long discussion took place with reference to an amendment of the Standing Orders proposed by Dr. BATTY TUKE. The amendment was framed with a view to meet a difficulty which arose some time ago in Edinburgh in connexion with the withdrawal of a qualification. The discussion resulted in a reference of the whole question to the Executive Committee for consideration and report during the present meeting.

The Council then adjourned.

WEDNESDAY, NOV. 23RD.

The Council resumed, Sir Richard Quain, M.D., President, in the chair.

Medical Aid Associations.

A communication in regard to Medical Aid Associations from the Wolverhampton Friendly Societies' Medical Association, calling in question the statements made by the Medical Defence Union and submitting a copy of their balance-sheet, and a memorial from Mr. W. R. Barclay, M.B., C.M. Aberd., in regard to the action of the Medical Aid Associations in Northampton, were referred to the special committee appointed on the previous day to inquire into and report on the subject.

Dublin University Medical Examiners.

Dr. HAUGHTON moved: "That, inasmuch as the reply of the medical examiners of the University of Dublin to the report of the visitor and inspector of the Medical Council (May–June, 1892) is already in the hands of the Registrar, it shall be considered at the present session of the Council." He was there, he said, to support a very important principle—a principle which had been recently violated by the friends of Sir Walter Foster, who was to second the motion—by first condemning a party and proceeding afterwards to inquire into the case. The principle was much older than Mr. Morley or his master, Mr. Gladstone, because it went back to the time of Rhadamanthus—an authority which even this Medical Council could not refuse to accept and acknowledge. Was this Council prepared to adopt the highly judicial authority of Rhadamanthus and say that, the University of Dublin medical examiners having been put on their trial, their reply was not to be considered? There was a principle of fairplay involved in the matter, and it was but fair and right that the report and the reply to it should be considered now and not postponed until some of them, including himself, were lying in their happy graves.

Sir W. FOSTER, M.P., seconded.

Dr. HERON WATSON doubted whether the Council was at present in a position to do what Dr. Haughton asked.

Mr. MACNAMARA supported the motion.

The debate was adjourned in order to proceed with the penal cases.

The Case of Dr. W. Maunsell Collins.

The next business was the consideration of the case of William Maunsell Collins (registered as M.D., Mast. Surg., 1866, Q. Univ. Irel.), who had been summoned to answer a charge of having been convicted of a felony. Dr. Collins appeared along with his counsel and solicitor respectively, Mr. C. F. Gill and Mr. Arthur Newton.

Mr. FARRER, solicitor of the Council, explained that on June 27th last, at the Central Criminal Court, Dr. Collins was convicted of forging a promissory note for £1500, and on the 25th of the following month he was ordered to enter into his own recognisances in the sum of £200 to appear and hear judgment when called upon.

Mr. GILL said that Dr. Collins submitted himself to the judgment of the Council as to whether they should think it right, in the discharge of their duty, to erase his name from the Medical Register. The Act of Parliament, he might remind the Council, made it entirely a matter of discretion whether they did so or not. There were many instances where this kind of discretion had to be exercised by other bodies. There were cases where persons who had earned pensions in the army or navy were charged with criminal offences and convicted of them, and it was a matter of discretion for the Treasury authorities whether the pensions should be forfeited. Counsel then proceeded to detail the circumstances in which Dr. Collins committed the offence,

and in conclusion appealed to the Council not to judge him more harshly than the Court before which he had appeared.

After conferring in private the Council determined to direct the Registrar to remove the name of Dr. Collins from the Medical Register.

The Council and the Registrar-General.

Mr. FARRER informed the Council that other cases of complaint than those which appeared on the paper had been put before the President during the past six months, but inasmuch as they mainly turned upon certificates of death and irregularities in giving them, it was thought by the Executive Committee of the Council that such cases were properly the business of the Registrar-General, whose office it was to protect his Acts; and by the direction of the President he (Mr. Farrer) had prepared a draft letter, which would be considered hereafter by the President, to point out that if the Registration Acts were not complete, the Council would gladly join the Registrar-General in any representation to the Home Office to make them satisfactory.

Sir WILLIAM TURNER explained that the Scottish Branch Council had had sent to them two letters from the Registrar-General for Scotland upon this matter. The Branch Council would meet to-morrow, and they must reply to the Registrar-General for Scotland, and it would be a great convenience to them if Mr. Farrer could give them some idea of the form of the letter which he proposed to address to the Registrar-General for England, because they might be able to utilise it in their answer to the Registrar-General for Scotland.

Mr. FARRER agreed to produce the draft letter.

The PRESIDENT said there could not be any subject of more importance than this, because the Registrar-General rather wanted to avoid doing his duty. Well, he did not do his duty in prosecuting certain people who had subjected themselves to penal consequences.

Mr. FARRER said the Council must not say that the Registrar-General did not do his duty because he did not see his way to take proceedings in cases where they might think he should. The Registrar-General did his duty to the best of his ability, but he (Mr. Farrer) did not want the Council to do the duty which properly fell upon the Registrar-General.

The Case of Mr. Stephen Francis Smith.

The Council then proceeded to consider the case of Mr. Stephen Francis Smith (registered as L.S.A. Lond., 1884), who was summoned to appear on a charge of having been convicted of giving a false certificate of death and also on a charge of covering an unqualified medical practitioner. Mr. Shultess Young, barrister, appeared for Mr. Smith, and Dr. Bateman for the Medical Defence Union.

Mr. FARRER stated that Mr. Smith was convicted at the North London Police-court for having in July last, at Seven Sisters-road, made a false certificate concerning the death of Caroline Coxford and fined £10 and costs. Information and evidence had been also laid before the Council by which the defendant was charged with having been guilty of infamous conduct in a professional respect, particulars of which alleged conduct were as follows:—"That he had habitually acted as cover to an unqualified medical practitioner named C. A. Smith, permitting and enabling him to practise as if he were duly qualified, and signing medical certificates in cases attended by the said C. A. Smith and not attended by him."

Mr. YOUNG, on behalf of Mr. Smith, elected to have both parts of the charge gone into together.

Dr. BATEMAN then called attention to the evidence which had been given at the police-court when Mr. Smith was convicted of making a false certificate of death, with the object of establishing the second part of the charge. The points he wished to bring most before the Council were—first, that the defendant lived in Woodford, Essex, and that the unqualified practitioner lived in Seven Sisters-road—a distance of some miles—and that the house in that road was taken and rated in the name of C. A. Smith, the unqualified practitioner. The only defence which could possibly be urged in Mr. Smith's favour was that he happened to be out on this occasion to an urgent midwifery case. The evidence of the Coxfords clearly proved that they had never heard of S. F. Smith nor seen him at their house before their mother's death, and that they had no idea that C. A. Smith, who attended them as the assistant of a deceased uncle of the defendant, was not a qualified man and would not be able to give them a certificate of death.

Mr. YOUNG called the defendant, who stated that he had practised in Seven Sisters-road and the neighbourhood since June, 1889, when he started in practice afresh. A year and a half later he became assistant to his father, whose surgery was at Stratford. He had days and hours of consultation at Seven Sisters-road. His unqualified assistant there was about fifty years of age, and had been assistant for about ten years previously to another medical man there. He was called in by the Coxfords on July 25th, and on the following day, finding the patient very ill, he telegraphed to witness at Stratford, where he had been called to a midwifery case. He telegraphed to his assistant to call in Mr. Herring, a local practitioner, and went himself to Coxford's as soon as he could get away from the midwifery case. When he arrived the woman had been dead twenty minutes. He was paid his bill by the friends of the deceased, and he paid Mr. Herring his fee. From what he heard he was quite satisfied as to the cause of death, and no doubt had been thrown upon the cause of death as stated. His assistant was not with him now.

In reply to Dr. Bateman, Mr. SMITH said the person whom his assistant was with ten years before he took the practice was his (witness's) uncle, who died in 1889.

Mr. W. ROBERT SMITH, a Member of the College of Physicians and Surgeons (Canada) and L.S.A. London, father of the defendant, and Mr. HERRING were examined in corroboration of defendant's statement. The latter stated that he had never been called in before by Mr. Smith. He should have been inclined to sign the certificate in this case.

Dr. BATEMAN: Do I understand you to say you would sign a certificate of the death of a patient whom you had only seen in an unconscious condition, being taken there by an unqualified practitioner?

Mr. HERRING: Yes.

In reply to questions by the members of the Council, Mr. SMITH said the unqualified assistant's name never in any way appeared on the house nor on the accounts sent out. The name of the unqualified assistant appeared in the local directory as that of a medical man, but it was unknown to them both; and the information must have been given by the servant to a man who came round in connexion with the directory. He (Mr. S. Smith) rented a few rooms at the house in Seven Sisters-road for the practice, but the rest of the house was occupied by C. A. Smith, who was a married man and was rated for the premises. There was no partnership between them. The assistant received a salary of £150 a year, and the total receipts were about £400. He (Mr. Smith) was still registered as at Woodford, Essex, his father's house.

Mr. MUIR MACKENZIE: Have you any explanation to offer of your signing a certificate of the death of a patient whom you had not seen?

Mr. SMITH: I saw the deceased late at night, and the friends asked for a certificate to be sent on that night. I went home and signed it. I considered when I signed it that as the patient was a patient in my practice I was the proper person to sign it.

Mr. YOUNG then addressed the Council on behalf of his client, who he contended had not been guilty of such serious misconduct as would induce them to remove his name from the Register. His act was no doubt one of reprehensible carelessness, but not an act of infamous conduct demanding the censure of the Council, still less the removal of his name from the roll. With regard to the employment of unqualified assistants, he saw them advertised for every week in THE LANCET, and if it was an illegal thing to employ them he hoped the medical profession would very soon be made aware of the fact by an authoritative statement from the Council. Meanwhile it would be most unfair and unkind if this man was to be made the first victim of this new idea which had come over the medical world.

Replying to Sir John Simon, Mr. YOUNG said it was certainly not conceded that C. A. Smith, the unqualified assistant, was habitually treating patients without the supervision of Mr. Smith.

The Council deliberated in private, and when the public were readmitted,

The PRESIDENT informed Mr. Smith that the Council had decided not to remove his name from the register, but at the same time they cautioned him to be more careful in his relationship to assistants in future, and particularly in regard to giving death certificates.

The Council then adjourned.

THURSDAY, NOV. 24TH.

The Council resumed their meeting, Sir Richard Quain taking the chair.

The Case of Mr. Stephen Francis Smith.

The PRESIDENT said there had been some complaint that he had not censured Mr. Smith. He wished to explain that he had no authority under the law to censure. That question had been raised before. The Council might remove a man's name from the Register, and it might caution him, but it could not censure him.

The Dublin University Examinations.

The Council resumed consideration of the motion proposed by Dr. Haughton and seconded by Sir Walter Foster, to the following effect—viz.: "That, inasmuch as the reply of the medical examiners of the University of Dublin to the report of the visitor and inspector of the Medical Council (May–June, 1892) is already in the hands of the Registrar, it shall be considered at the present session of the Council."

Mr. MACNAMARA said he was strongly of opinion that the report with reference to the University of Dublin should be taken into consideration. He would be met at once with the objection that it had not gone to the Examination Committee, but he could not for the life of him say what light the committee could throw upon the question. The report of the visitor and inspector was in the hands of the Council, and so also were the answers of the examiners. It was proposed to postpone the matter, and from experience he judged that to mean until the Greek Kalends. He had the honour of being a visitor, and he had with him the report made on that occasion (1886) by the visitors upon a certain university. He would like to ask the chairman of the business committee what action had been taken by the Council upon the report. It had been shelved. He could not willingly submit to the censure that had been made in the report on the examinations of the University of Dublin. He would not allow that censure to go to the medical world without one word of reply or one expression of opinion of this Council on the merits of the case. They were always very fond in Ireland of speaking of the sense of justice that actuated the English mind, and what he asked for now was fair play.

Sir WILLIAM TURNER said the Council was not in a position to discuss this matter. He would like to put it to Dr. Haughton whether the Council should discuss the report of the inspector and visitor without having before it the answer of the University of Dublin.

Dr. HAUGHTON said the answer was in the Registrar's pocket.

Sir WILLIAM TURNER said his point was that the answer was not in the hands of the Council.

Dr. HAUGHTON promised the Council that it would find the answer very interesting.

Sir WILLIAM TURNER said he had no doubt upon that point, but neither the Council nor the Examination Committee had seen the report. It was a mistake on the part of Mr. Macnamara to speak of the report in question going out to the medical world. The report was a confidential document.

Sir WALTER FOSTER said he had seldom heard a more extraordinary argument than that advanced by Sir William Turner. It was an argument that would be worthy of an official grown grey in the Circumlocution Office. His position was that the Council must not discuss a matter of public interest because, forsooth! the Council had not taken the trouble to look at a document in its possession. It was the fault of the Council if it were not acquainted with the document. He protested against this method of meeting a grave resolution like the one before the Council. He wanted the reports of the inspector and visitor considered by the Council from time to time as they were delivered. If they were to have anything like effective criticism of the reports, they must consider them in detail and not *en masse*. His wish was to have the reports considered *seriatim*, a method of treatment which would be effective and save much valuable time. He hoped that if the Council did not accept the resolution in the exact form proposed it would, at all events, resolve that at the next session this report should be considered, together with any other reports that the inspector had already made.

Sir DYCE DUCKWORTH, as Chairman of the Examination Committee, objected to these reports being constantly in the boiling pot.

Dr. BATTY TUKE moved as an amendment, "That in the opinion of the Council it is inexpedient to take into consideration the reports of the inspector and visitors of examinations until the visitation of the final examination is completed." If each report were considered separately it would lead to great waste of time, for the old battles would be fought over and over again.

Dr. HERON WATSON seconded the amendment, saying that in his opinion it would be wrong on the part of the Council to discuss this particular report until it had the matter fully before it, and especially until it had the report of the Examination Committee.

Dr. ATTHILL thought the amendment raised a question altogether apart from that of the motion.

Sir WILLIAM TURNER proposed as an amendment, "That in the opinion of the Council it is inexpedient to take into consideration the reports of the inspector and visitors of examinations until the report of the Examination Committee on these inspections has been received." He must repudiate the reflection upon his public conduct made by Sir Walter Foster. He would not submit to it without a protest. He wished to ask the Council why an examination committee had been appointed, why the Council had solemnly some years ago appointed an examination committee and an education committee? They were appointed to receive the reports, and, after having carefully considered them and analysed them, to present to the Council what might be described as a fair judgment upon the reports and the answers given by the bodies inspected. It would be entirely out of place for this Council to take up the report upon the University of Dublin or any other examining body, even if the answer were before it, which it was not in this instance, when the Examination Committee had not seen and analysed the report.

Sir WALTER FOSTER said that Sir W. Turner had confused the remarks he made. They were a criticism of his arguments, not of him personally, and he had not drawn the distinction which he thought he might have drawn in the interest of the courtesies of debate.

Mr. BRUDENELL CARTER thought that it would be practically abolishing the Examination Committee if the Council proceeded to discuss this matter without their report.

Sir DYCE DUCKWORTH said that his idea as Chairman of the Examination Committee was that they should not consider the reports piecemeal, but wait until they were all in.

Mr. TEALE moved as a further amendment, "That so many of the reports of the inspector and visitors as shall be in the hands of the Council, with the answers of the bodies affected before the May meeting, along with the reports of the Examination Committee thereupon, be then considered by the Council."

Dr. GLOVER seconded this amendment.

Dr. BATTY TUKE amended his amendment to the following form—viz.: "After the reports of the Examination Committee on the reports of the inspector and visitors of examinations and the answers of the authorities inspected or visited have been laid before the Council, the Examination Committee is requested to report on the inspections from time to time as they are sent in."

Dr. HAUGHTON wound up the discussion with a short reply.

Dr. Batty Tuke's amendment was lost by three votes, while Mr. Teale's was carried.

On Mr. Teale's amendment being put as a substantive motion,

Sir JOHN SIMON expressed doubt as to whether the Council should adopt it without reference to the Examination Committee.

Sir DYCE DUCKWORTH said he would be prepared to bring forward a motion on the subject on the following day.

Dr. MACALISTER, seconded by Mr. BRUDENELL CARTER, moved, "That the reports of the visitor and inspectors of the final examinations, together with any remarks made by the examining bodies thereupon, be referred as they come in to the Examination Committee, and that the committee be requested to report to the Council at the May session on such of the final examinations as have been visited or inspected prior to the end of March, 1893."

Mr. TEALE said he would be happy to accept this motion in place of his own.

The Council took the same view and adopted Dr. MacAlister's motion.

Direct Representatives.

Sir W. FOSTER moved: "That in the opinion of this Council the number of direct representatives on the General

Medical Council should be increased, in order to give the registered practitioners resident in England and Wales a representation on the Council in proportion to their numbers, as compared with the representation given to the practitioners resident in Scotland and in Ireland." At the outset he asked the Registrar whether he had received from the medical profession or any other bodies interested in this Council any representation in favour of an increase in the direct representatives.

Mr. MILLER said he had received none since the motion was made last year.

Sir W. FOSTER was sorry to hear that, and thought he might attribute it to the attitude of the Council towards his motion when it was rejected last year, and not to any diminution on the part of the profession in the earnestness of their desire to have an increased voice upon the body which governed the affairs of the profession. Since he last moved the motion there had been an election of direct representatives, in which there were certain incidents which he thought were unsatisfactory, and which pointed to a certain amount of apathy on the part of the profession with reference to their representation on the Council. Compared with the previous election there was a grievous falling off in the active interest taken in the election; and that, he thought, was not a healthy state of things. In 1886 74·1 returned their voting papers, whereas in 1891 only 68·3 made the return, and in neither case was the poll as heavy in this educated profession as it would be in any manufacturing or rural constituency for a representative in Parliament. He did not think that was creditable to the profession. Others might draw the inference from this that the medical profession was perfectly satisfied with the present direct representatives, and did not take the trouble to vote for those it had. That, however, was a reflection on the profession which he did not wish to cast. But he did not think it satisfactory that in 1886 25 per cent. of the papers in England and Wales were not returned, and, in 1891, 38 per cent. In Ireland 41·5 per cent. were returned, and in Scotland there was no contest. He hoped when future opportunities occurred that the profession would take a much more vivid interest in electing its direct representatives. He had altered the form of his resolution from that of last year, limiting it to England. He placed his argument to-day on the numerical basis, and that basis was the disproportion of the representation of England and Wales as compared with Ireland and Scotland. Taking the Medical Directory he found there were 19,319 practitioners in England and Wales. There were three direct representatives—Dr. Glover, Mr. Wheelhouse and himself—and that gave one representative to every 6528 registered practitioners. On the other hand, he found that Dr. Kidd came there representing 2445 practitioners, and that 2850 practitioners in Scotland had as much power there as 6528 practitioners of England and Wales. He did not say that Scotland or Ireland had too much power; he wanted England to have more power in the Council in proportion to the greater number of practitioners resident in this division of the United Kingdom. If the same proportion were observed in regard to England as to Scotland and Ireland, England would have some eight direct representatives having regard to the Irish representation and seven having regard to that of Scotland. The Act of 1886 empowered them to carry this claim into effect, and if the Council were to make a representation to the Privy Council he had no doubt the latter body would give its sanction to additional representation. If that were not done, the position became difficult. The profession, if they were in earnest about the matter, could raise the question in many ways. They could raise it in the House of Commons and by approaching the Privy Council directly. The Medical Council was now asked to assist to remedy an injustice, and he thought it would be wise, expedient and, on all grounds, morally right and righteous if the Council would recognise the disparity and take steps to remedy it. If they did not, they put themselves in the position of refusing an appeal to their sense of justice.

Mr. WHEELHOUSE seconded the motion.

Mr. TEALE: Does Sir Walter Foster propose also that there should be an increase in the Crown representatives to represent the public?

Sir W. FOSTER: I have no objection—I am not a Crown member.

Dr. GLOVER said that as this discussion had arisen, and as Sir W. Foster had spoken with very sweet reasonableness on the matter, he begged to support it. The great argument had been well stated by him—namely, the great disproportion between the direct representation of England and that of Scotland and Ireland. He (Dr. Glover) called on the members of the Council, and that strong sense of justice which they possessed to consider this disproportion and the desirability of remedying it. There was another reason why he thought this proposal was a reasonable one. No observant member of the Council could fail to see that every successive meeting of this Council brought before it a number of questions very deeply affecting medical practice and medical practitioners in this country, especially, he might say, general practitioners. Considering both these reasons, it would be a mere act of justice on the part of the Council to sanction the very modest proposal of Sir W. Foster and so terminate this discussion, which would be a recurring one if not settled, and which would be raised in other quarters.

Sir JOHN SIMON said that not having the honour of being a direct representative, he did not know what the exigencies of that position might be, but if it involved the bringing before this Council of a motion of this character, he did not envy the occupant. He could hardly believe from his experience of the sagacity of Sir W. Foster that he was not quite conscious of the utter fallacy of his argument. His argument rested altogether on a numerical hypothesis. What reason was there to suppose that a numerical hypothesis was contemplated in the constitution of this Council?

Sir W. FOSTER said he explained a third member for England under the Act of 1886 on the ground of the number of practitioners living in that country.

Sir J. SIMON believed that never in the annals of Parliament was a Bill passed under less creditable circumstances than the Medical Act of 1886, and he believed if Sir W. Foster had asked for more he would have got it. He (Sir John Simon) absolutely denied that the numerical principle was recognised in the constitution of this Council. They had suffered disadvantage from their present numbers, and no one could pretend to say that it would be for the advantage of the transaction of their business that their membership should be increased beyond thirty. He could hardly suppose that Sir W. Foster could seriously propose to secure his object by getting rid of Dr. Kidd and Dr. Bruce. The proposal seemed to him quite unreasonable, and he repeated the remonstrance he made last year—that the time of the Council should be taken up with the consideration of the question.

Dr. PETTIGREW did not think that Sir W. Foster had made out any case, and maintained that the numerical idea was utterly absurd.

Dr. WILKS submitted that the numerical basis was entirely wrong, and moved the previous question.

Sir W. FOSTER: That deprives me of my right of reply.

Dr. GLOVER appealed to Dr. Wilks to give way.

Sir W. FOSTER also appealed to Dr. Wilks, who, however, did not give way.

In accordance with the standing order the Council at once voted, when it was decided by 16 to 8 to pass to the next order. At the request of Sir W. Foster the names of the members were taken.

The Punishment of Defaulters.

Mr. BRYANT had the following notice of motion on the paper:—"That no person who has been removed from the Medical Register by the Council under one of the penal clauses of the Medical Act of 1858, Secs. 28–29, should be restored under two years." He said he had been induced to place it on the minutes because he had felt in common with many members the inconvenience of constant attempts on the part of those who had been removed from the Register to be restored to it after the lapse of only a few months. It seemed to him it was very desirable that they should allow the profession to understand that they looked very seriously upon offences of that kind, and did not mean to trifle with them at all; and that they should for the future let every man feel that there was no possibility of success in appealing to the kind feeling of the Council to be restored before a certain period of time elapsed. It seemed to him, if they were serious in this matter, that two years was not too long a period. He was told by their solicitor that it would not be wise for them to put such a resolution upon their records; but if not, surely there could be no possible objection to their giving some kind of instruction to the Registrar, so that when anyone applied at the office to know whether there was any prospect of his being restored, the Registrar might be empowered to say that not

until the lapse of two years would it be expedient for him to make the attempt. He moved, instead of the motion on the paper, "That it be an instruction to the Registrar that no application on the part of a person who has been removed from the Medical Register by the Council under one of the penal clauses of the Medical Act of 1858, Clauses 28 and 29, be entertained under two years."

The PRESIDENT said the solicitor told him yesterday that the proposal on the paper was one virtually passing sentence before they tried a man. He said there were many different degrees of offence, and he did not think they could pass any such resolution.

Dr. MOORE did not think they should pass such a resolution.

Sir W. FOSTER appealed to Mr. Bryant to withdraw the motion, not, however, because he considered it in any way too severe, but because the Council showed on some occasions, he was sorry to say, a weakness in dealing with these offenders. If Mr. Bryant had said one year he thought it would be eminently judicious, but he thought two years too long.

Dr. BRUCE suggested as an amendment that the limit of the suspension should be until the name had ceased to appear in at least one issue of the Medical Register.

After a brief discussion, in which the general feeling seemed to be against both proposal and amendment,

Mr. BRYANT withdrew his resolution and the subject dropped.

The Restoration of Diplomas.

Dr. GLOVER moved: "That Mr. Muir Mackenzie's opinion be taken on the following question—viz.: Have the bodies the right to withhold the qualifications of a registered practitioner whose diplomas have been withdrawn from them only on the action of the Medical Council and in cases where the Council has ordered the restoration of the name to the Register? If they have—Has the Council the power to restore the name of a practitioner all of whose qualifications have been withdrawn?"

Mr. TEALE seconded the motion.

Sir WILLIAM TURNER thought it beyond the power of Mr. Muir Mackenzie to answer the second question.

Mr. BRUDENELL CARTER said, with regard to the Society of Apothecaries, that it certainly had the power to withdraw its licence from a licentiate, but it had no power of reinstatement.

Mr. BRYANT explained that the College of Surgeons had this power.

Dr. ATTHILL said the first question, in his opinion, was impracticable. He did not think Mr. Muir Mackenzie would undertake such a task or that the licensing corporations would coöperate with him in what would after all be an inquisitorial inquiry. He moved the omission of the first question.

Dr. HERON WATSON pointed out that the Scotch corporations were not likely to accept the opinion of an English barrister on a matter of this kind.

Dr. GLOVER asked leave to withdraw the first question.

The Council agreed to this.

After some discussion the second question was accepted by the Council in the following form—viz.: "In the event of the name of any practitioner being expunged from the Medical Register by direction of the Council, and of his qualifications being afterwards withdrawn by the examining bodies which granted them, has the Council any power to restore the name to the Register, and if so, under what description as regards qualification?"

The Midwifery Question.

Sir WILLIAM TURNER moved: "That the Registrar be requested to inform Dr. Rentoul that the certificates referred to in his memorial are neither licences nor diplomas within the meaning of the Medical Acts, and possess no legal value. The Council would also point out that, whilst the certificate granted to women might express that the holder had been trained as a practical midwife, it yet gives no legal qualification to practise." He could not help thinking that Dr. Rentoul failed to appreciate the true position of these certificates. As a matter of fact, they were mere expressions of opinion by certain persons who had taught midwives and examined them. They had no legal value whatsoever.

Mr. WHEELHOUSE seconded the motion. No matter what the wording of the certificates might be, there was a strong feeling among many members of the profession that these people believed themselves to be in the possession of a diploma which enabled them to practise midwifery.

After further discussion, the first part of the motion was agreed to.

The second part was afterwards adopted in the following form—namely: "That the President be requested by the General Medical Council to point out to the institutions and persons who grant such certificates that the certificates should be expressed in such a form as not to lead to the impression that it is a legal qualification to practise midwifery."

"Covering" by Dentists.

The Council next proceeded to deal with the following draft warning to registered dentists against the employment of unqualified assistants, prepared by the solicitor:—

"Any registered dentist practising for gain who knowingly and wilfully deputes a person not registered or qualified to be registered under the Dentists Act, of professionally treating on his behalf in any matter requiring professional discretion or skill any person requiring operations in dentistry of a surgical character, will be liable to be treated as having been guilty of infamous or disgraceful conduct in a professional respect, and to have his name erased from the Dentists' Register."

Sir W. FOSTER, moved that the draft warning, which he presumed was in the best egal form, be adopted.

Mr. WHEELHOUSE seconded and the motion was agreed to.

Dr. GLOVER wished to know how this warning was to be put into the hands of the dental profession. They were constantly met in the case of medical offenders by the plea of ignorance. He suggested that a copy of the warning be sent to every person on the Dental Register from this Council.

Sir W. FOSTER said this came before the Executive Committee in consequence of action by the Dental Association, who offered to circulate any warning of this kind among their members. He objected to that course as unworthy of the Council. He did not think they should rely on any private body doing that kind of work for them. He was informed that the method adopted when the warning was issued to the medical profession was to publish the warning in the minutes and advertise it in the medical journals. But they were constantly met by the plea on the part of accused parties that they were not aware of an offence until they were accused. He moved that this warning be issued from the office of the Council to every gentleman whose name appeared on the Dental Register.

Dr. GLOVER seconded the motion. It would not cost much, and then there would be no excuse for ignorance.

Sir W. TURNER thought the dentists would have not the least reason to complain if the course adopted in regard to the medical profession were followed in their case.

The REGISTRAR pointed out that the Dental Association undertook to forward any warning adopted by the Council to the persons on their Register whom it more immediately concerned.

The Council, by 16 votes to 4, adopted Sir W. Foster's motion.

The PRESIDENT: It has been carried that this is to be done from the office here. I confess I think that it is a very great mistake.

The Council adjourned.

Pharmacology and Therapeutics.

CARDIO-VASCULAR ACTION OF THEOBROMINE AND CAFFEINE.

DR. COHNSTEIN, who has been working in Professor von Schröder's laboratory at Heidelberg on the effects of theobromine, caffeine and other similar substances on arterial pressure, confirms the views of Wagner, von Schröder and Binz as to the power of caffeine, or trimethylxanthin as it is chemically named, to raise the blood pressure, this being due to stimulation of the vaso-motor centre. At the same time it exerts a direct influence on the heart, as may be inferred from the alteration observed in the pulse, not merely as to its frequency but as to its hardness and the length of the pulse wave. Theobromine was recommended by von Schröder and Gram as a valuable diuretic, but the clinical observations of Hoffmann, Geisler and others caused this to be disputed, as it was believed by some that the undoubted hydragogue effect of theobromine was the result of direct renal irritation. Others, however, referred the diuresis to the effect on the heart and vessels. Dr. Cohnstein, whose experiments were carried out on dogs and rabbits, is

inclined to conclude that the diuretic effect of the drug is to be traced to a direct stimulation of the kidneys and to consider the improvement in the blood pressure, and therefore of the pulse, as secondary effects resulting from the improvement in the circulation which naturally follows the disappearance of œdema. Other xanthin compounds were studied, but the only one which can be said to have at present any practical interest is œthoxycaffeine, which has been recommended by Dujardin-Beaumetz and others in migraine.

A NEW REMEDY FOR GONORRHŒA.

Dr. Alejandro Infante, a military medical officer, communicates to the *Revista Médica de Chile* an account of several cases of gonorrhœa and gleet which had proved rebellious to ordinary methods of treatment, but had been rapidly cured by the internal use of the fluid extract of a plant, the Aplopappus llareta, which, like many other species which yield resins, belongs to the division tubuliferæ or cynaro-cephalæ of the order Compositæ. A fluid extract was prepared and this was made into a mixture with water in the proportion of from 2 to 5 per cent. In the chronic cases two or three tablespoonfuls were ordered daily. In a very acute case, where the urethra was almost impervious, a tablespoonful of a 1 per cent. mixture was ordered, at first every hour, and subsequently in less frequent doses of a stronger mixture.

TREATMENT OF LUPUS.

Encouraged by the accounts of satisfactory results obtained by Lannelongue, Augagneur, Dubois,[1] and other French surgeons in tuberculous diseases of bone by means of injections of sulphate of zinc, Dr. J. J. Fedoroff of the Borntskovski District Hospital has employed the same treatment for lupus with excellent results. He publishes two cases in the *Vrach*, No. 27, in both of which the disease was of long standing. His plan was before injecting to shut off the affected locality from the general circulation by compress bandages, and to induce local anæsthesia with cocaine. A 10 per cent. solution of sulphate of zinc was used, about eight minims being introduced at each puncture. From two to four punctures were made around each ulcer, the point of the needle being directed under the base. About the third day the circumference became red and swollen; the next day necrosed tissue appeared on the base of the sore, which came away three or four days later, revealing a healthy granulating surface, and in from a fortnight to three weeks cicatrisation was completed. In the cases thus treated there were several sores, and these were not all treated at the same time, it being considered inadvisable to make more than ten punctures at one sitting. None of the ulcers required any renewal of the treatment. If cocaine was not employed a severe burning pain was produced by the injections. With cocaine this was very much lessened. The after treatment consisted simply in a glycerine dressing. There was never any rise of temperature.

PROPHYLAXIS AND TREATMENT OF YELLOW FEVER.

Dr. Carlos Finlay of Havana, having in view the experimental researches of several European observers on the possibility of rendering animals insusceptible to the infection of diphtheria and tetanus by means of injections of the blood serum of animals which are naturally insusceptible to these diseases or which have been artificially made so, has proposed to apply a somewhat similar treatment to human beings in order to render them insusceptible to yellow fever, and even to act as a therapeutic measure in cases where this disease has already made its appearance. Of course it must be remembered that yellow fever presents many points of divergence from most other endemic and epidemic diseases. No definite bacteriological cause has been made out, and if there be a microbe it exists in some part of the body not yet determined, and there produces toxines which, being absorbed by the body, set up the disturbance which is characterised by the peculiar symptoms of yellow fever. Again, natives of localities where the disease is endemic enjoy immunity, also those who have resided in such localities for many years, but this immunity is destroyed by a prolonged absence, so that it is probable that whatever it is that confers immunity must be repeatedly introduced into the system. Dr. Finlay suggests that blood serum from acclimatised, that is to say, from insusceptible, persons might be expected to confer immunity if injected in a minute quantity into the system of persons newly arrived in countries where yellow fever prevails, and that probably a much larger quantity might act as a remedy in cases where the attack had already commenced. There are, of course, in Cuba plenty of insusceptible persons, but it would not be easy to find any who would allow a sufficient quantity of blood to be drawn for the purpose. He therefore proposes to make use of the serum obtained by means of blisters, which is almost identical with that obtained from the blood. He has been able to put this method in practice in only a single case, but in this the results were encouraging; and as the procedure, if carried out with due antiseptic precautions, is perfectly harmless, there is no reason, he thinks, why it should not be given a fair trial. In the case alluded to Dr. Finlay, fearing on the second day that the attack would prove to be one of yellow fever, blistered his own forearm and obtained a few cubic centimetres of serum, which he preserved in sealed tubes. On the fifth day, the symptoms becoming pronounced, he injected half a cubic centimetre of the serum under the patient's shoulder. A very few hours later the nausea and the restlessness passed off and did not return; the temperature, too, sank, though this may have been due to doses of antipyrin. The albuminuria did not cease until the twelfth day, and the icteric tint was present up to the fifteenth; but the patient made a good recovery, the improvement certainly dating from a few hours after the injection of serum. It should be added that there was no soreness or induration at the seat of the puncture. Dr. Finlay's paper, which was read before the Havana Academy of Sciences on Aug. 14th, is published in the *Revista de Ciencias Médicas* of Aug. 20th.

[1] Le Mercredi Médical, 18 Mai, 1892

THIOL *v.* ICHTHYOL IN GYNÆCOLOGY.

Dr. Stanislaus Kurtz, writing in the *Kronika Lekarska*, gives several reasons founded on his own experience for preferring thiol to ichthyol in gynæcological practice. The great reason probably why ichthyol has not become better known in this country as a valuable remedy in many skin and gynæcological cases is its very disagreeable smell, which it is difficult to cover satisfactorily. Thiol, on the other hand, is odourless. Ichthyol, again, sometimes produces a smarting sensation when introduced into the vagina, from which disagreeable property thiol is free, and indeed it has a tendency to allay pain. Lastly, thiol stains are much more easily removed from linen than are those due to ichthyol. As to the therapeutic uses of thiol Dr. Kurtz has employed it both in hospital and private practice in endometritis after abortion, endocervicitis with erosions and in parametritis. He reports his experience in nineteen cases, in every one of which the results were satisfactory. He used a solution of from 10 to 20 per cent. for applying to the cervical canal either with a probe or by means of tampons impregnated with the solution. Effusions and solid exudations were rapidly resolved by means of thiol tampons in the vagina and these also allayed the pain complained of in the lumbar and pubic regions. In very long standing cases of pelvic exudations Gottschalk of Berlin has very successfully employed thiol tampons simultaneously with inunction of the same substance over the lower part of the abdomen; he also sometimes employs it internally.

TRIONAL AS A HYPNOTIC.

According to Dr. Böttiger of Halle trional is a particularly efficient and safe hypnotic. He has employed it in more than seventy cases of a mental and nervous character, and it very rarely produced giddiness, lassitude or any other disagreeable symptoms. Its action was generally manifested in about a quarter of an hour, fifteen grains being often, and thirty grains invariably, sufficient to induce sleep. Where the excitement was but slight the trional succeeded very well in quieting the patient and in inducing sleep, and even in cases of severe mental excitement several doses of fifteen grains each during the day acted so well as a sedative that hyoscine could be dispensed with. The only cases in which trional failed were those in which there was very severe neuralgia or where the mental and motor excitement was extreme, or in alcoholic patients. The drug was given at times by enemata, in the same doses as by the mouth, with equally satisfactory results.

MYRRHOLIN.

Dr. Kahn of Würzburg employs a solution of myrrh in an equal quantity of oil, under the name of "myrrholin," together with creasote, in laryngeal and pulmonary phthisis, finding that the myrrholin enables patients to bear the creasote far better than when the latter is given alone. He is not, however, as yet able to say whether the myrrholin exerts any direct action on the disease. He prescribes a mixture of 30 centigrammes of creasote with 20 centigrammes of myrrholin for a dose, to be taken in capsules. A cerate of

myrrh has also proved very useful in eczema of the nostrils and in atrophic rhinitis, both simple and fetid. Pledgets of cotton wool impregnated with the cerate are passed into the nostril and allowed to remain ten or fifteen minutes.

ROYAL BRITISH NURSES' ASSOCIATION.

THE PETITION FOR A CHARTER.

THE Committee of the Privy Council appointed to consider the petition for a charter of incorporation made on behalf of the Royal British Nurses' Association met on Monday at the offices of the Privy Council in Downing-street. The Committee consists of the Marquis of Ripon, Lord Oxenbridge, Lord Hobhouse and Lord Hannen. Sir Horace Davey, Q.C., Mr. Muir Mackenzie, Q.C., and the Hon. W. H. Cross appeared for the petitioners, and Sir Richard Webster and Mr. L. S. Bristowe for the respondents, who are the governing bodies of training schools and hospitals in various parts of the country as well as the Council of the Nightingale Fund.

Sir Horace Davey, stating the case for the petitioners, explained that the Association was a purely charitable organisation. It did not seek profit, nor did it seek any compulsory powers. It was founded five years ago, its great object being to establish a register of nurses founded on the certificates of competency given by the training schools and hospitals. In no sense whatever did it seek to enter into competition with any of these institutions or to control their action. Its great aim was to save the public from being imposed upon by incompetent or inefficient nurses. By inefficient he meant, not only inefficient in skill, but inefficient in point of character. The Association did not pretend to train nurses. It did not pretend to do more than inquire into the competence and character of the persons applying for registration, and to state on the register the result of the inquiry. The registration was, of course, purely voluntary. There was no statutory provision that no one should have the right to call herself a nurse unless her name appeared on the register. The second object of the Association was to afford facilities for nurses exercising thrift and making provision for old age and for those accidents to which nurses were peculiarly exposed. The third object was to afford as much as could be facilities for rest and what might be called recreation. The nurse's life was exposed to great peril of sickness, and periods of rest and recreation were essential, and it was thought that this Association might supply a convalescent home for those who required it. Another object of the Association was to promote meetings, lectures and the like. Since its inauguration five years ago the Association had received a much larger measure of support than even its most sanguine friends expected. His information was to the effect that there were about 2700 nurses upon the register, published yearly by the Association. The importance of this figure would be appreciated when he informed their lordships that there were, according to estimate made, not by his clients, but by others, about 5000 trained nurses in the United Kingdom and about 15,000 women engaged in nursing. Their lordships had also to bear in mind that the Association had had the opposition of some of the principal hospitals and training schools, who had, from their point of view, done all they could to prevent their pupils and nurses entering on the register of the Association. In the circumstances of the case, he thought the Association had good reason to congratulate itself on the large number of nurses on its register. A great deal of the opposition to the Association had proceeded from a misunderstanding of the facts of the case, and he wished to make it clear to their lordships that the Association in no sense undertook to train nurses, but left that work entirely to the useful institutions now carrying it on. The Association desired to act, not in opposition to these institutions, but as supplemental and ancillary to them. It wanted to tell the world what persons held certificates and qualifications from them, leaving the world to judge of their value. One reason for desiring incorporation was the difficulty in obtaining funds. The petitioners had reason to believe that there were charities which would devote funds to such a work as the Association carried on if the latter were incorporated. If the work of the Association were admitted to be useful, then he contended it would be more advantageously and efficiently carried on if the Association had the status of an incorporated body rather than that of a voluntary institution which might be dissolved at any moment. The petition, he might say, enjoyed the support of something like 1100 medical men, 1000 nurses and the matrons of hospitals all over the world. The opposition to it proceeded mainly from training schools and hospitals which derived a large part of their income from the out-nurses in their employment. The Association only admitted to its register the names of women who had gone through three years' training, while most of the training schools and hospitals which opposed the petition required a much shorter period of training.

Lord Hobhouse pointed out that there was nothing in the Charter about a three years' course of training.

Sir Horace Davey said that the period of training would be defined in the by-laws of the Association.

Lord Hobhouse.—And of course the by-laws may be altered by the Association.

Sir Horace Davey.—Certainly.

Lord Oxenbridge.—Is the register to be gone through year by year and purged? A good character might in course of time disappear.

Sir Horace Davey replied that this was a matter of some difficulty. All the Association could do was to say that at the time of registration the person registered was capable and reliable. The guarantee of the Association was solely with regard to the period of the training; it had no reference to the character of the training.

Sir Richard Webster then presented the case of the respondents. Before dealing with what he said it may be convenient to state here the reasons drawn up by his clients and presented to their lordships. They were to the following effect:—1. That a general register is not adapted to the calling of nurses for the sick, and that any possible register of nurses would be misleading to the public and detrimental to the interests of nursing. 2. That the proposed register of nurses is in no way analogous to the existing register of medical men, and that the arguments in support of the latter do not apply to the former. 3. That a register of nurses could not be effectually carried on except under statutory powers. 4. That any attempt to maintain such a register under the authority of a Charter would lead to mischievous results. 5. That the grant of a Charter would enable the Royal British Nurses' Association to acquire a real, if indirect, power of controlling the education of the whole nursing profession. 6. That the Royal British Nurses' Association is not a sufficiently representative body, and that it has not secured sufficient support or achieved sufficient success to enable it to be entrusted with such powers. 7. That it has not the means of discharging the duties and responsibilities which the Charter would impose upon it. 8. That the establishment at the present time of any register of nurses would be premature and injurious. 9. That a general register of nurses is unnecessary. That the other objects for which the incorporation is sought can be accomplished without the grant of a Royal Charter.

Sir Richard Webster submitted that if any such powers as those contemplated in the Charter were granted they must be surrounded and safeguarded by provisions analogous to those found in the Medical, Pharmacy, and other Acts. He could not help thinking that there was a good deal of misapprehension about the whole business. It arose from a little forgetfulness of some first principles. This Association could get itself incorporated at once if it simply chose to use the word "limited." It was not a fact that a corporation must carry on trade simply because it used this word. The question for their lordships was whether, the Board of Trade not having thought fit to allow the Association to be incorporated with the omission of the word, the Association should be entitled to incorporation by Royal Charter. He contended that this could not be regarded as a purely optional system of registration. If the Association received this Royal Charter its register would come to be considered by the public as a series of certificates. Every person whose name appeared on the register would be regarded as a person in every way fit and qualified to be upon the register of duly trained and qualified nurses; thus it would become compulsory for a nurse to get admission to the register.

Lord Oxenbridge.—You mean that, in your opinion, if a nurse wants business she must get upon this register?

Sir Richard Webster replied in the affirmative. He contended that the register set forth in the proposed Charter would not lead the public in any way to the source of information from which they could best obtain convenient and

accurate particulars as to what were the qualifications of the nurse.

When the Committee adjourned Sir Richard Webster had not concluded his speech. The Committee will meet again on Monday next.

CHOLERA.

CURRENT NOTES, COMMENTS AND CRITICISM.

THERE is no need to say much this week in the way of comment in our chronological record of the progress of epidemic cholera. There have been manifestations of the disease at numerous places widely separated from one another, showing that the cholera cause is extensively distributed, and probably ready to develop itself afresh hereafter on the occurrence of conditions favourable to its manifestations. The disease seems to have obtained a firmer footing in Russia than in other countries. The cholera returns for the past week indicate that the epidemic still prevails there to a serious extent. The reports from St. Petersburg show that in the eighteen districts principally affected there were altogether 3313 cases and 769 deaths, of which the highest figures are from Podolia, Kieff, Bessarabia and Kherson. Apart from these districts, the disease still lingers in fourteen other provinces, where the weekly mortality varies from 10 to 20, while the number of cases is sometimes as high as 50. In St. Petersburg itself the returns for the week were 58 cases and 19 deaths; at Moscow there were 45 cases and 33 deaths; at Warsaw 170 cases and 71 deaths; and at Gitomir 52 cases and 27 deaths. According to a report in *The Times* the Medical Department of the Ministry at St. Petersburg had determined on summoning a council of medical men who had acquired a practical experience of the disease during the present epidemic in that city towards the end of December, with the view of considering the question of the best means of preventing or limiting its spread during the ensuing spring and summer.

Cholera still prevails at Budapest, where there were as many as 10 fresh cases and 5 deaths on the 20th inst.; but these numbers declined to 6 cases and 1 death according to the report of the 22nd from that city. From the Hague we learn that there have been sporadic cases at Utrecht, Breda, Rotterdam and several other places. Last week there were 14 deaths from cholera in the entire country, and there have been 242 since the beginning of the epidemic. There have been several cases of cholera in Brussels, at Bruges and other places. From France we learn that an outbreak occurred at a home for destitute poor at Ville Vaude, in the Seine-et-Marne, where 5 cases occurred. At Dunkirk 6 cases of cholera and 4 deaths were reported at the beginning of the week. *The Temps* publishes a despatch from Lorient to the effect that for the past three weeks choleraic diarrhœa had prevailed there, upwards of 100 cases having occurred, of which about 30 had proved fatal. The disease is specially rife in the suburbs, principally at Kerentrech. The deaths have chiefly occurred among poor, aged or enfeebled people. There have been some cases also in the neighbouring country; at the village of Locmiquelle there were 20 fresh cases on Tuesday last and 4 deaths.

INTERNATIONAL MEDICAL CONGRESS, ROME, 1893.

THE following is a list of the English committee formed to further the su cess of the above Congress:—

Sir James Paget, Bart.
Sir Andrew Clark, Bart.
Mr. Thomas Bryant.
Sir Dyce Duckworth.
Mr. Hutchinson.
Sir George Humphry.
Sir W MacCormac.
Sir Henry Acland, Bart.
Professor Clifford Allbutt.
Sir R. Quain, Bart.
Mr. J. N. Dick, C.B.
Sir W. A. Mackinnon, K.C.B.
Sir J. Fayrer, K.C.S.I.
Dr. Charles Taylor.
Dr. G. H. Philipson.
Sir Joseph Lister, Bart.
Dr. Withers Moore.
Sir W. Turner.
Professor Michael Foster.
Dr. J Watt Black.
Mr. H. Power.
Mr. Shirley Murphy.
Mr. Gordon Brown.
Dr. Cheadle.
Dr. Saundby.
Dr. Dreschfeld.
Mr. Mitchell Banks.
Mr. T. P. Teale.
Mr W. F. Favell.
Dr. E. Long Fox.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN thirty-three of the largest English towns 6057 births and 3632 deaths were registered during the week ending Nov. 19th. The annual rate of mortality in these towns, which had been 19·6 and 19·5 per 1000 in the preceding two weeks, further declined to 18·6 last week. In London the rate of mortality was 18·4 per 1000, while it averaged 18·7 in the thirty-two provincial towns. The lowest rates in these towns were 12·4 in Halifax, 13·1 in Wolverhampton, 13·3 in Croydon, and 14·1 in Derby; the highest rates were 22·4 in Brighton, 22·5 in Preston, 23·6 in Burnley, 25·1 in Bolton, and 25·7 in Salford. The 3632 deaths included 392 which were referred to the principal zymotic diseases, against 434 in each of the preceding two weeks; of these, 137 resulted from measles, 61 from scarlet fever, 53 from diarrhœa, 51 from whooping-cough, 47 from diphtheria, 39 from "fever" (principally enteric), and 4 from small-pox. No fatal case of any of these diseases occurred last week in Norwich; in the other towns they caused the lowest death-rates in Derby, Wolverhampton, Burnley, and Liverpool, and the highest rates in Croydon, Hull, Brighton and Salford. The greatest mortality from measles occurred in Cardiff, Nottingham, West Ham, Oldham, Hull, Croydon, Brighton and Salford; from scarlet fever in Swansea, Newcastle-on-Tyne and Plymouth; from whooping-cough in Salford and Swansea; from "fever" in Preston, Halifax and Sunderland; and from diarrhœa in Plymouth, Gateshead and Blackburn. The 47 deaths from diphtheria included 29 in London, 3 in Birmingham, 2 in West Ham and 2 in Brighton. Two fatal cases of small-pox were registered in Leeds, one in Sheffield, and one in Leicester, but not one in London or in any other of the thirty-three large towns; 15 cases of this disease were under treatment in the Metropolitan Asylum Hospitals (of which 12 had been admitted during the week) and 2 in the Highgate Small-pox Hospital on Saturday last. The number of scarlet fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital at the end of the week was 4045, against 4067 and 4063 on the preceding two Saturdays; 404 new cases were admitted during the week, against 462 and 403 in the preceding two weeks. The deaths referred to diseases of the respiratory organs in London, which had been 319 and 357 in the preceding two weeks, declined to 340 last week, and were 80 below the corrected average. The causes of 76, or 2·1 per cent., of the deaths in the thirty-three towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Cardiff, Nottingham, Sunderland, Newcastle-upon-Tyne, and in seven other smaller towns; the largest proportions of uncertified deaths were registered in West Ham, Birmingham, Blackburn, Preston and Sheffield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 22·9 and 20·6 per 1000 in the preceding two weeks, rose again to 21·5 during the week ending Nov. 19th, and exceeded by 2·9 per 1000 the mean rate during the same period in the thirty-three large English towns. The rates in the eight Scotch towns ranged from 17·2 in Dundee and 18·2 in Greenock to 24·1 in Perth and 37·2 in Leith. The 598 deaths in these towns included 65 which were referred to measles, 24 to scarlet fever, 11 to diarrhœa, 11 to "fever," 7 to whooping-cough, 6 to diphtheria, and 3 to small-pox. In all, 127 deaths resulted from these principal zymotic diseases, against 109 and 110 in the preceding two weeks. These 127 deaths were equal to an annual rate of 4·6 per 1000, which exceeded by 2·3 the mean rate last week from the same diseases in the thirty-three large English towns. The fatal cases of measles, which had been 69 and 61 in the preceding two weeks, rose again to 65 last week, of which 22 occurred in Edinburgh, 16 in Glasgow, 15 in Leith, and 11 in Aberdeen. The deaths referred to scarlet fever, which had been 13 and 19 in the preceding two weeks, further rose to 24 last week, and included 14 in Glasgow, 4 in Edinburgh, and 4 in Leith. The 11 fatal cases of diarrhœa exceeded those recorded in any recent week, and included 6 in Dundee. The deaths referred to different forms of "fever," which had increased from 2 to 9 in the preceding three weeks, further rose to 11 last week, of which 7 occurred in Glasgow and 2 in Dundee. The fatal cases of diphtheria, which had declined from 12 to 5 in the previous

three weeks, were 6 last week, and included 3 in Glasgow. The deaths referred to diseases of the respiratory organs in these towns, which had been 142 in each of the preceding two weeks, were 137 last week, and were 177 below the number in the corresponding week of last year, when an epidemic of influenza prevailed. The causes of 57, or nearly 10 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 28·5 and 23·9 per 1000 in the preceding two weeks, was again 23·9 during the week ending Nov. 19th. During the first seven weeks of the current quarter the death-rate in the city averaged 23·2 per 1000, against 17·9 in London and 21·6 in Edinburgh. The 160 deaths in Dublin during the week under notice included 5 which were referred to diarrhœa, 2 to "fever," one to measles, one to whooping-cough, and not one either to small-pox, scarlet fever, or diphtheria. In all, 9 deaths resulted from these principal zymotic diseases, equal to an annual rate of 1·3 per 1000, the zymotic death-rate during the same period being 1·7 in London and 5·3 in Edinburgh. The 5 fatal cases of diarrhœa exceeded the number recorded in any recent week. The deaths referred to different forms of "fever," which had been 10 and 5 in the preceding two weeks, further declined to 2 last week. The 160 deaths registered in Dublin last week included 27 of infants under one year of age and 46 of persons aged upwards of sixty years; the deaths, both of infants and of elderly persons, slightly exceeded the numbers recorded in the preceding week. Three inquest cases and 3 deaths from violence were registered; and 54, or more than a third of the deaths, occurred in public institutions. The causes of 19, or nearly 12 per cent., of the deaths in the city last week were not certified.

THE SERVICES.

THE following gentlemen who competed at the examination held on the 7th inst. and following days, at the Examination Hall, Victoria-embankment, for appointment as Surgeon in the Royal Navy have been successful:—

	Marks.		Marks.
Archdale, Henry S. ..	2841	Bunton, C. L. W., M.B.	2446
Clayton, F. H. A., M.B.	2813	Lumley, Fredk. D. ..	2396
Tyffe, Reginald Jas. ..	2652	Meagher, Edwd. Thos.	2302
Lord, Percy, M.B. ..	2577	Tomlinson, Henry E.	2220
Dalton, Fredk. J. A. ..	2515	Bell, Arthur Sydney G.	2218
May, Percival M. ..	2468	Gilpin, Bernard Bevill	2133

MOVEMENTS OF MEDICAL STAFF.

Brigade-Surgeon-Lieutenant-Colonel Burnett has been posted to Fermoy. Surgeon-Major Smythe has been transferred from the South-Eastern District to Cork, and Surgeon-Major Core from Gravesend to Aldershot. Surgeon-Captain Bond has arrived at St. Lucia and Surgeon-Captain Rawnsley has been transferred thence to Jamaica. Surgeon-Captain Scott has arrived from India on sick leave. Surgeon-Major Drury and Surgeon-Captain Risk have been posted to Aldershot. Surgeon-Captain Harris has been transferred from Devonport to Pembroke Dock and Surgeon-Captain Cocks from the South-Eastern District to Colchester. Surgeon-Colonels Wade and Rudd have been ordered home from India in anticipation of promotion.

The annual examination of Surgeon-Captains for promotion has been fixed for Feb. 6th, 1893.

ARMY MEDICAL STAFF.

The following promotions are announced:—Surgeon-Colonel Philip B. Smith, M.D., to Surgeon-Major-General; Brigade-Surgeon-Lieutenant-Colonel Alexander F. Churchill, M.B., to Surgeon-Colonel, vice P. B. Smith, M.D.; Surgeon-Lieutenant-Colonel James Williamson, M.B., F.R.C.S.I., to Brigade-Surgeon-Lieutenant-Colonel, vice A. F. Churchill, M.B.; Surgeon-Lieutenant-Colonel William H. Steele, M.D., F.R.C.S.I., to Brigade-Surgeon-Lieutenant-Colonel, vice J. R. Murray, M.D., F.R.C.S. Edin., retired; Brigade-Surgeon-Lieutenant-Colonel John Ross Murray, M.D., F.R.C.S. Edin., has been placed on retired pay.

INDIAN MEDICAL SERVICE.

Surgeon-Lieutenant F. E. Swinton has been brought on the strength of the Bombay Medical Establishment. Surgeon-Captain T. D. C. Barry and Surgeon-Captain L. F. Childe have respectively delivered over and received charge of the duty of Professor of Chemistry in the Elphinstone College. Surgeon-Captain J. T. W. Leslie, M.B., Bengal Establishment, Officiating Chemical Examiner and Professor of Chemistry, Medical College, Calcutta, has been appointed to officiate as Secretary to the Surgeon-General and Sanitary Commissioner with the Government of India until further orders. Surgeon-Major G. S. A. Ranking, M.D., Bengal Establishment, Officiating Secretary to the Board of Examiners, Calcutta, has been appointed to officiate as Chemical Examiner and Professor of Chemistry, Medical College, Calcutta. Surgeon-Major E. L. Maunsell, A.M.S., has been transferred from general duty Poona District, to general duty Scinde District. The following promotions have been approved by Her Majesty:—Bengal Medical Establishment: Brigade-Surgeon-Lieutenant-Colonels: Alfred Swaine Lethbridge, M.D. (dated April 9th, 1892; Arthur Stephen (dated April 16th, 1892); John Henry Newman, M.D. (dated June 1st, 1892.)—Madras Medical Establishment: Surgeon-Lieutenant-Colonel Fredk. Henry Blinkinsop to be Brigade-Surgeon-Lieutenant-Colonel (dated May 23rd, 1892).—Bombay Medical Establishment: Brigade-Surgeon-Lieutenant-Colonel David Erskine Hughes, M.D. to be Surgeon-Colonel (dated Sept. 15th, 1892); Surgeon-Lieutenant-Colonel Joseph Forbes Keith, M.D., to be Brigade-Surgeon-Lieutenant-Colonel (dated Sept. 15th, 1892). The Queen has also approved of the retirement from the Service of the undermentioned Officers:—Colonel John Barnes Sparks, Indian Staff Corps (dated May 17th, 1892); Surgeon-Colonel John Charles Morice, Bengal Medical Establishment (dated Oct. 24th, 1892).

NAVAL MEDICAL SERVICE.

The under-mentioned Staff Surgeons have been promoted to the rank of Fleet Surgeon in Her Majesty's Fleet:—Henry Thompson Cox (dated Nov. 12th, 1892); Richard Gavin Brown, M.B. (dated Nov. 13th, 1892.) The following appointments have been made:—Surgeons: Joseph R. Macdonnell, M.D., additional to the *President*; Arthur S. Nance, to the *Alacrity*; and Jeremiah Sugrue, M.D., to the *Shannon*.

VOLUNTEER CORPS.

Rifle: The following appointments have been made:—7th Middlesex (London Scottish), Surgeon-Captain J. A. Watson (Honorary Surgeon-Major), from the Volunteer Medical Staff Corps—London Companies Surgeon-Captain; 1st Volunteer Battalion, the Lancashire Fusiliers, Robert Mitchell, M.D., Surgeon-Lieutenant; 3rd Lanarkshire, Surgeon-Major John Dunlop, M.D., Surgeon-Lieutenant-Colonel.

The Volunteer Officers' Decoration has been conferred upon the following officers:—*North British District—Artillery:* 1st Aberdeenshire Artillery Volunteers, Surgeon-Lieutenant-Colonel James Rodger, M.D.; 1st Argyll and Bute Artillery Volunteers, Surgeon-Lieutenant-Colonel William Hunter; 1st Ayrshire and Galloway Artillery Volunteers, Surgeon-Lieutenant-Colonel Robert Blane Erskine, M.D.; 1st Caithness Artillery Volunteers, Surgeon-Lieutenant-Colonel George Banks, M.D.; Surgeon-Major (ranking as Lieutenant-Colonel) T. H. Rutherford, M.D., retired; Surgeon and Honorary Surgeon-Major George Burn, M.D., retired; the Highland Artillery Volunteers, Surgeon-Lieutenant-Colonel Alexander Sclanders, M.D.; 1st Lanarkshire Artillery Volunteers, Surgeon-Major James Simpson Cumming, M.D.; 1st Midlothian Artillery Volunteers, Surgeon-Major (ranking as Lieutenant-Colonel) James Carmichael, M.D., retired; 1st Orkney Artillery Volunteers, Surgeon-Lieutenant-Colonel Wm. Aitchison Wilson, M.D., Surgeon-Lieutenant-Colonel John William Taylor, M.D.—*Mounted Rifles:* Late 1st Roxburgh (Border) Mounted Rifles, Brigade-Surgeon-Lieutenant-Colonel Patrick Kynoch, retired.—*Rifle:* The Queen's Rifle Volunteer Brigade, the Royal Scots (Lothian Regiment), Brigade-Surgeon-Lieutenant-Colonel Sir Douglas Maclagan, Knt., M.D., Surgeon-Lieutenant-Colonel Patrick H. Watson, Surgeon-Major (ranking as Lieutenant-Colonel) Alexander Gordon Miller, retired, Surgeon and Honorary Surgeon-Major Robert James Blair Cunynghame, M.D., retired; 5th Volunteer Battalion, the Royal Scots (Lothian Regiment), Surgeon and Honorary Surgeon-Major John Henderson, M.D., retired; 6th Volunteer Battalion, the Royal Scots (Lothian Regiment), Surgeon-Major Alexander Ballantyne, M.D.; 7th Volunteer Battalion, the Royal Scots (Lothian Regiment), Surgeon-Captain John Liddle Crombie, M.D.; 8th Volunteer Battalion, the Royal Scots (Lothian Regiment), Surgeon-Lieutenant-Colonel Andrew Gilmour; 1st Volunteer Battalion, the Royal Scots Fusiliers, Surgeon-

Lieutenant-Colonel James McAlister; Surgeon-Major (ranking as Lieutenant-Colonel) Archibald Blair, retired; 2nd Volunteer Battalion, the Royal Scots Fusiliers, Surgeon-Major Robert Girvan; Galloway Rifle Volunteer Corps, Surgeon-Lieutenant-Colonel Walter Lorraine, M.D.; 3rd (Dumfries) Volunteer Battalion, the King's Own Scottish Borderers, Surgeon and Honorary Surgeon-Major William Johnstone Carlyle, M.D., retired; 2nd Volunteer Battalion the Cameronians (Scottish Rifles), Surgeon-Lieutenant-Colonel Bruce Goff, M.D., Surgeon-Major (ranking as Lieutenant-Colonel) James London, M.D., retired, Brigade-Surgeon-Lieutenant-Colonel, James, Dunlop, M.D., Surgeon-Lieutenant-Colonel J. Dunlop, M.D.; 2nd (Angus) Volunteer Battalion, the Black Watch (Royal Highlanders), Brigade-Surgeon-Lieutenant-Colonel John Mackie, jun., M.D., Surgeon-Lieutenant-Colonel Wm. Fettes Murray, M.D., Surgeon-Lieutenant-Colonel Jas. Keith Anderson, M.D., Surgeon-Lieutenant-Colonel G. Paton Alexander, Surgeon-Major (ranking as Lieutenant-Colonel) S. Lawrence, M.D., retired; 3rd Volunteer Battalion the Highland Light Infantry, Surgeon-Lieutenant-Colonel John Ewan Brodie, M.D.; 9th Lanarkshire Rifle Volunteer Corps, Surgeon-Lieutenant-Colonel John Lindsay; 5th (Glasgow) Highland Volunteer Battalion the Highland Light Infantry, Surgeon-Major (ranking as Lieutenant-Colonel) Thomas Drysdale Buchanan, M.D., retired; 1st (Ross Highland) Volunteer Battalion Seaforth Highlanders (Rossshire Buffs) (Duke of Albany's), Surgeon-Lieutenant-Colonel Alexander Robertson Mackenzie, M.D.; 1st Volunteer Battalion the Gordon Highlanders, Brigade-Surgeon-Lieutenant-Colonel Angus Fraser, M.D.; 2nd Volunteer Battalion the Gordon Highlanders, Surgeon-Captain William Mortimer; 5th (Deeside Highland) Volunteer Battalion the Gordon Highlanders, Surgeon-Lieutenant-Colonel W. R. Duguid; 1st (Renfrewshire) Volunteer Battalion Princess Louise's (Argyll and Sutherland Highlanders), Surgeon and Surgeon-Major W. Johnston Marshall, M.D., retired; Surgeon-Major Michael Benny, M.D., Surgeon and Honorary Surgeon-Major William Johnstone, M.D., retired; 5th Volunteer Battalion, Princess Louise's (Argyll and Sutherland Highlanders), Surgeon and Honorary Surgeon-Major John Reid, retired; 1st Dumbartonshire Rifle Volunteer Corps, Surgeon-Lieutenant-Colonel Peter France Robertson, M.D.

THE LATE ISAZAI EXPEDITION.

We gather from the *Pioneer Mail* of the 27th ult. that the troops engaged in the late expedition suffered much in health from the great diurnal changes of temperature at the head of the Indus valley. There was a good deal of what popularly goes by the name of "sun fever" among the men of the force, and it is said that some 700 or 800 soldiers are still suffering from mild attacks of continued fever since their return to cantonments.

THE FRENCH EXPEDITION IN DAHOMEY.

Since the date of the late sharp engagement, the intelligence of which was received just as we were going to press last week, no accounts of further operations on the part of General Dodds' force have apparently reached the French Government. The troops have now been upwards of two months in the country and, in addition to the injuries resulting from some severe fighting, there has, of course, been much inevitable sickness from malarious fevers and dysentery attributable to the unhealthy climate. As far as can be gathered from the reports that have reached this country the organisation and management of the expedition, military and medical, have so far been very creditable to the French, and General Dodds is recognised as an excellent administrator as well as a good soldier. The account of the unhealthy and debilitated appearance which the 200 invalid soldiers presented on their disembarkation in Marseilles will remind many of the aspect and condition of the men of the Royal Marines on their return from the Gold Coast during the earlier period of the Ashanti War. From the latest information it appears that the fall of the capital has taken place and it is hoped that peace will be concluded by the French upon such terms as will secure in the future a more humane and better state of things in Dahomey.

THE EXAMINATION OF CANDIDATES FOR THE ARMY MEDICAL STAFF.

We would call attention to the fact that an examination of candidates for twelve commissions in the Army Medical Staff will be held at the University of London, Burlington-gardens, on Feb. 6th next and following days. Application for admission to the examination should be made in writing to the Director-General of the Army Medical Department, War Office, London.

THE EXAMINATION FOR ADMISSION INTO THE ROYAL MILITARY COLLEGE, SANDHURST.

The parents of candidates for Sandhurst, as well as the candidates themselves, will do well to remember that there are some new regulations in connexion with the medical examination which will come into force on the present occasion. The examination, as we announced last week, will take place on the 28th and 29th instant.

FEVER EPIDEMIC IN GUZERAT.

An epidemic of malarial fever attended with great mortality has broken out in the Guzerat district. Intelligence has been received in Bombay from Patan, Radhanpore, Masani, Visnagar, and various other small towns and villages in Guzerat, of the great prevalence of malarial fever. The people are generally in great destitution, and without any medical or nursing aid. The sickness and mortality are stated to be something appalling. In Patan alone forty or fifty persons are dying daily, and it is much the same at other places. The epidemic is the result of a water-logged soil following heavy rains and overflowing rivers. The inhabitants of Guzerat resident in Bombay have held a meeting and raised subscriptions in aid of the sufferers from the epidemic.

THE LATE LIEUTENANT HUDDLESTONE, R.E.

At the adjourned inquest on the 21st inst., Dr. Stevenson, analyst to the Home Office, gave evidence to the effect that he agreed with the opinion previously expressed by the local medical men that the death of this officer was attributable to poisoning from decomposition of animal matter contained in tinned sardines. Dr. Stevenson had fed various animals with some of the fish, and inoculated others with matters obtained from the contents of the stomach and from the sardines, with a fatal result to several of the animals experimented on; but he was not able to state exactly what kind of decomposition it was that had caused the fatal poisoning. The decomposition was not likely to have resulted from anything in the solder of the sardine box. The cause of the decomposition of animal matter could not gain access if the boxes were properly tinned and manufactured. The goods supplied to the officers' mess are believed to have been obtained from the Army and Navy Stores, and there does not appear to have been anything about the sardines to have excited attention. The flesh of certain kinds of apparently healthy fish even, especially in the tropical seas, have been known to produce poisonous symptoms, such as gastro-intestinal irritation and severe ataxic nervous symptoms, attended with marked depression. In the case in question, however, the poisonous principle, of the nature of a ptomaine probably, was no doubt the product of some form of decomposition. The jury returned a verdict of "Death by misadventure, caused by eating decomposed sardines."

HONOURABLE MENTION OF MEDICAL OFFICERS.

In the official correspondence of the Lushai field operations we are glad to notice the name of Surgeon-Captain J. F. Evans, M.B., 18th Bengal Cavalry. This officer was reported as having shown unremitting care of the sick of all ranks, and as having, by his medical zeal and energy, maintained the health of the corps whilst serving in a notoriously unhealthy part of the world. Surgeon-Captain Evans's services in these respects have been acknowledged by the Government of India and Lord Roberts. Surgeon-Captain Williams and Surgeon-Captain Green, M.S., are names which are also honourably mentioned in despatches relating to operations recently carried out in the Chin Hills and on the north-east frontier of Burmah. Their services have been likewise recognised by the Government of India and the Commander-in-Chief, Lord Roberts.

EAST LONDON HOSPITAL FOR CHILDREN.—At the half-yearly Court of Governors of this charity a favourable report was given of the progress of the institution. Its finances had been materially increased, and the new out-patients' room had been completed and is now occupied. To defray the cost of this addition, however, some £2000 is still needed. The formation of a convalescent home is in contemplation, and towards this object a donation of £1000 has already been received.

Correspondence.

"Audi alteram partem."

"EXPERIMENTS ON ANIMALS."

To the Editors of THE LANCET

SIRS,—Mr. Lawson Tait asserts that nothing could be more fallacious than to assume that the recent success in intestinal surgery is due to experiments on animals. In support of this assertion he says he has successfully applied the flap-splitting method for the union of the divided intestine for years before the experiments of Senn, Robinson and myself were ever heard of. So successful has his plan been that he has only had one failure in some two or three scores of cases. Upon this assertion it seems strange that his old pupil, Dr. F. Byrom Robinson, should not have adopted Mr. Lawson Tait's method instead of suggesting the use of raw hide and segmented rubber plates. Stranger still that, with such marvellously good results following Mr. Lawson Tait's operation, surgeons at Liverpool, Leeds and London should have introduced the use of decalcified bone tubes and bobbins. Since the time Travers wrote his treatise on "An Enquiry into the Processes of Nature in repairing Injuries of the Intestine," in 1812, until the present day, surgeons have been endeavouring to devise some method of uniting the divided ends of the intestines, and I still maintain that it was not until Senn published the results of his experiences, the direct outcome of experiments on animals, on intestinal anastomoses that any real progress was made or any safe plan of operating on the intestine suggested; and yet now Mr. Lawson Tait tells us that for years before these experiments were heard of he had been in the habit of uniting the divided ends of the intestines by a method than which nothing could be "simpler or more effectual." He scoffs at the clumsy plates, bobbins, &c. This being so, I would ask Mr. Tait why he has not published his plan of operating before? Why has he not shown his cases and demonstrated his method of operating at some one of the medical societies? By doing so, what an amount of time, trouble and vexation he would have saved us poor surgeons who have for years been endeavouring to devise some means of reducing the frightful mortality that has hitherto existed after resection of the intestine—viz., 50 per cent. If he had only done this, should we not all have rushed to the banner of the man who showed such results as Mr. Tait has attained—only one failure in some two or three scores of cases? He does not mention a death, only one failure. If only Mr. Tait had taught us this method, this simple and effectual flap-splitting method, how many lives might have been saved? What a number of poor animals in whom Mr. Tait takes such an interest would have been spared? It is not, however, now too late, and I trust that Mr. Lawson Tait will at an early date see his way to describe fully his method of operating. It would be interesting if Mr. Lawson Tait would tell us in what class of cases he has adopted his operation. Were the resections of the intestine performed for injury to the intestines due to direct violence, or to gangrene of the intestine following strangulation of a loop of gut, or to what causes? Mr. Lawson Tait further says that we now know that the operation of gastro-enterostomy leads to permanent continuous fæcal regurgitations, so that the whole scheme of such operations is gradually being dropped. Mr. Lawson Tait may be interested to hear that such is not my experience; neither do I intend to drop the operation, which I am sure is of great benefit, and in many cases life has been considerably prolonged and rendered comfortable.

Mr. Lawson Tait concludes his letter by saying he knows of no operation in intestinal surgery to which he would himself submit other than the operation as performed at present by himself. It behoves Mr. Tait, then, to at once impart to the profession his method of operating, as I can find no mention of it in any of the surgical literature at my disposal, and it would be hard upon Mr. Tait if such a calamity should befall him as to necessitate an operation on his intestines and nobody knew how to perform his special flap-splitting operation.—I am, Sirs, yours faithfully.

FRED. BOWREMAN JESSETT, F.R.C.S.Eng.

Buckingham Palace Mansions, S.W., Oct. 13th, 1892.

To the Editors of THE LANCET.

SIRS,—I am sorry to find Dr. Tyson has also made the fatal mistake of under-estimating the strength of his adversaries. I did not do him the injustice of crediting him with any leaning towards the enemy, but his letter gave me the impression that he had rightly judged the true cause of the strength of the agitation against us. Dr. Tyson cannot be aware that the three greatest writers of our time—Browning, Tennyson and Ruskin, with many names of lesser eminence—have declared themselves strongly opposed to the practice of vivisection, or he would hardly say we have the educated classes almost wholly with us. The medical profession has taken upon itself to justify physiological research by the results obtained. The pure scientists look upon vivisection as a legitimate means of research independent of the results obtained, and theirs is the only ground we can safely take. If the means is not legitimate the end can never make it so; if it is legitimate it needs no justification. I maintain that we have put ourselves in a false position in assuming to shield our brethren from the attacks of an unenlightened public. In this false position lies the strength of our adversaries. A distinguished living F.R.S., himself a physician and a physiologist, speaking to me some ten or twelve years ago of a more distinguished pupil whose leaning was towards pure science, said, "I advised him to take up medicine as a back door to science. Pure science does not pay in this country." I have always thought this to be a prostitution of medicine. Physiological research is as distinct from the practice of medicine as is astronomy from navigation, and any attempt to combine the two will endanger our position in the eyes of the public.

I am, Sirs, yours truly,

WM. F. CLARKE, M.D., B.S.Lond.

Fulham, Nov.14th,1892.

"ABDOMINAL SECTION IN PELVIC PERITONITIS."

To the Editors of THE LANCET.

SIRS,—In your excellent abstract of the adjourned discussion at the Obstetrical Society a misstatement made by one of the speakers is duly reported, but without the correction which immediately followed it.

Mr. Knowsley Thornton called attention to the "extraordinary fact that nearly half" my "operations were incomplete." The context showed that what he meant by "incomplete" was that I had failed to complete the operation that I had intended to perform. I pointed out to Mr. Thornton at the meeting, and I shall be glad if you will allow me to point out to him once more, that when in the summary of my paper I spoke of a certain number of my operations having been "complete" and a certain number "partial" I meant by the word "partial" cases where the disease, and therefore also the operation for its removal were limited to one side. The phrase had no reference to unfinished operations, of which I had happily none to record.

Mr. Thornton also misunderstood that part of my paper which referred to the question of hæmatocele; and on this subject too I at once, in order to save unnecessary discussion, pointed out where he was in error. I should have dealt with his other criticisms in due course at the close of the discussion, but as Mr. Thornton did not wait to hear my reply I did not feel called upon to make any further reference to his remarks beyond answering a question.

May I also be permitted to correct an error in your report of my reply? On page 1166, column 1, line 22 from top, the words "current year" should be "current half-year," the cases referred to having been published in THE LANCET for July 2nd and 9th, 1892. I am, Sirs, yours faithfully,

Brook-st., W., Nov. 19th, 1892. CHAS. J. CULLINGWORTH.

To the Editors of THE LANCET.

SIRS,—In the discussion at the Obstetrical Society of London on Dr. Cullingworth's paper on Abdominal Section in Certain Cases of Pelvic Peritonitis, several speakers expressed the opinion that inflammatory diseases of the uterine appendages are very rarely the cause of death. Thus Dr. John Williams thought that Dr. Cullingworth's mortality of 18 per cent. was several hundred times greater than that of the disease, and Mr. Knowsley Thornton had never seen a fatal result from perimetritis. The same point is made prominent in your leading article on the discussion, and it is obviously

of the first importance in estimating the advisability of the operation. I had not intended taking part in the discussion, not being a partisan of either side in the controversy. But I should have been tempted to offer a small contribution to the evidence on this subject had I not been prevented from being present at the time. Some years ago, in order to estimate the importance of diseases of the Fallopian tubes, I went through the post-mortem records of Guy's Hospital for the three years 1884–86. I chose those years because at that time the special attention of the pathologists had already been directed to diseases of the tubes, but not many operations for these conditions were yet performed at Guy's Hospital. There were 302 necropsies of women above the age of puberty. Among these were 26 cases, or 8·6 per cent., of inflammatory matting about the uterine appendages, not including any case of tumour or tubercle. There were twelve cases of distended tubes, but only two of pyo-salpinx, and no case of rupture of a distended tube into the peritoneum. Notwithstanding this, there were seven cases, including the two cases of pyo-salpinx, in which the lesion of the tubes appeared to be the primary origin of the fatal disease. No operation had been performed in any of these; and, for the most part, they were not sent down from the gynæcological ward, but had been in a medical or surgical ward for peritonitis, abscess or apparent tumour, or for some obscure abdominal disease. The mortality therefore amounts to 26·8 per cent., as compared with the number of cases of chronic adhesions, and 2·3 per cent. as compared with the total number of necropsies. The number of cases is too small to establish a general average of mortality, but I submit that this is positive evidence, as far as it goes, that inflammation of the tubes is not to be despised as a cause of mortality, and that such evidence is of more value than the general impression of a speaker that he has seen many cases of perimetritis and has rarely seen a fatal result follow. Other direct evidence to the same effect from the records of other hospitals has been published. Thus Dr. Kingston Fowler found within three years in the post-mortem room of the Middlesex Hospital fifteen cases of distended tubes, in eight of which the disease of the tubes had been indirectly the cause of death. Dr. Lewers, in 100 necropsies at the London Hospital, found seventeen cases of distension of the tube, in two of which the pelvic condition was the cause of death. In these three groups of cases the mortality of tubal inflammation, compared with the total number of necropsies, appears to be similar, although in Dr. Lewers' cases the relative proportion of tube distension is much greater.

It must be admitted that the cause of death is rarely or never perimetritis alone, but rather general peritonitis, burrowing abscess, or, occasionally, septicæmia or apparent tumour simulating ovarian tumour. In one of the cases of pyo-salpinx referred to above, as found in the post-mortem room of Guy's Hospital, the condition appeared at first sight to be one of double suppurating ovarian tumour. In two cases since that time I have found pyo-salpinx to simulate suppurating ovarian tumour, the patients being evidently in a dying condition from septicæmia. In one of these one tube contained 36 ounces, the other 24 ounces, of fetid pus. In the other the left tube contained more than 30 ounces of pus and had separated the layers of the broad ligament, burrowing under the sigmoid flexure, its muscular wall hypertrophied to more than half an inch in thickness. The right Fallopian tube was also converted into a pyo-salpinx, but retained its usual anatomical relations. Both these cases ended fatally after operation and go to swell my mortality from operations for diseased tubes. But I think that they furnish an argument, not against such operations, but rather in favour of their being performed before it is too late. If these patients had undergone operation while the pyo-salpinx contained only an ounce or two of pus, and before they had fallen into a septic condition, they would, in all probability, have recovered without serious disturbance. Evidently it is the sequelæ of perimetritis rather than the primary perimetritis which are liable to prove fatal. Thus I have met with one case in which the immediate cause of death was pyo-nephrosis and degeneration of both kidneys caused by pelvic pressure.

I am, Sirs, yours faithfully,

Wimpole-street, Nov. 22nd, 1892. ALFRED L. GALABIN.

DEATH FROM IRRITATION OF ASCARIDES.

To the Editors of THE LANCET.

SIRS,—Mr. Hillyer, in THE LANCET of Oct. 1st, expresses the opinion that death from the irritation of ascarides is extremely rare. This may be the case at home, but in this colony round worms not infrequently prove fatal without revealing at the necropsy clear evidence of the way in which death has been produced. On looking through my notes of medico-legal necropsies in cases of sudden death during six years, I find the following record as regards round worms:—In five cases the post-mortem examination showed either no lesions or only such as could be attributed to the presence of worms in the intestine. In two cases round worms were found associated with other conditions, once with malarial fever, and once with pregnancy and dilated heart. In one case death was due to asphyxia caused by a round worm impacted above the epiglottis.[1] The first five cases are those which concern the present inquiry. In one of these a volvulus was discovered in the ascending colon.[2] In another, cerebral effusion was found. This has been mentioned by Eichberg[3] as a result of intestinal worms. In the other three cases, one of which has also been recorded,[4] there was nothing beyond the presence of the round worms to account for death. Besides these cases I have seen four others in which the evidence of death from round worms seemed so clear that I did not consider necropsies necessary. If, then, this is the result of observation in one part of the colony during a limited period, it may fairly be argued that death from this cause is by no means uncommon out here. I understand that a similar frequent mortality obtains in the neighbouring colony of British Guiana. In my experience the cases usually terminate too rapidly for the supervention of congestion or inflammation of the intestine such as is described by Eichberg and others, and I have always regarded the cerebral symptoms as mainly reflex. It is of course conceivable that violent and prolonged convulsions may in some cases produce such conditions as cerebral effusion or volvulus.

I am, Sirs, yours truly,

Trinidad, Oct. 31st, 1892. BEAVEN RAKE.

CHYLURIA.

To the Editors of THE LANCET.

SIRS,—Dr. Manson's want of success in the treatment of chyluria is no doubt disappointing, though he need not be discouraged in the face of the results of two cases recorded by me in THE LANCET of February 14th, 1891, which are the first examples of chyluria depending on filariæ in the blood I have ever seen permanently cured. The after history of these cases is as follows:—The second patient is at present well, and has had no return of chyluria or of filariæ in the blood. The first patient has also had no return either of the filariæ or of chyluria. But it is an interesting fact that he is now in an advanced stage of tuberculous leprosy, which commenced six months after he had recovered and the thymol treatment was stopped. Possibly there is a connexion between the two diseases. It must be borne in mind, however, that leprosy is endemic in Hyderabad. Dr. Manson's mechanical theory of chyluria is, I believe, hardly tenable. Are we to understand that filariæ possess an affinity for, or the power of selecting, a particular spot in the thoracic duct and there setting up inflammation and a stricture, and that this is the only damage to the system caused by their presence in the blood? To me the invasion and disorganisation of the blood by filariæ are more than sufficient to account for all the phenomena of chyluria described in such an interesting manner by Dr. Manson. Thymol cannot of course cure stricture of the thoracic duct, but it appears to kill the filariæ; and it is never illogical to remove the cause of a disease. In my cases filariæ in the blood were, as far as we could judge, the sole cause of the chyluria. As the filariæ died off under treatment with thymol the chyluria disappeared and has not recurred. A similar result has since been obtained by Dr. Hehir.

I am, Sirs, your obedient servant,

Hyderabad, Deccan, Oct. 30th, 1892. EDWARD LAWRIE.

MANCHESTER.

(FROM OUR OWN CORRESPONDENT.)

Small-pox: Meeting of the Medical Officers of Health Society.

THE epidemic of small-pox cannot yet be said to be abating in the towns of Lancashire and Yorkshire, where its presence has been noted for some weeks past. In Warrington espe-

[1] Brit. Med. Jour., June 11th, 1887, p. 1274.
[2] Ibid., March 24th, 1888, p. 642.
[3] Ibid., Oct. 31st, 1885, p. 842. [4] Ibid., Jan. 9th, 1886, p. 60.

cially the disease appears to have obtained a firm foothold; vaccination and revaccination have evidently been neglected for some years past, and so it happens that, the disease having once made headway in the town, abundant pabulum for its wholesale dissemination is at hand in the large proportion of either unvaccinated or imperfectly vaccinated persons. The hospital is stated to be full, and as further accommodation in time to meet the present emergency seems not to be forthcoming, large numbers of the patients have to be treated at their own homes. Under these circumstances it is not surprising that the epidemic still continues to spread. It is reported that within the last fortnight more than a hundred new cases of small-pox have occurred in Warrington. On the 18th inst. an important discussion took place in this city at the monthly meeting of the North-Western Health Officers' Society, on the present prevalence of small-pox. Mr. Vacher, the late able medical officer of health for Birkenhead, who introduced the subject, gave it as his opinion that revaccination and vaccination, as well as notification and isolation, were far more commonly neglected in these parts than was consistent with the public weal. The fact that the Royal Commission on Vaccination had hitherto failed to present their complete report tended, he thought, to convey the erroneous impression to the lay mind that the protection conferred by vaccination was uncertain, and that the whole question, from a medical point of view, was still *sub judice*.

Urmston and Local Government.

Last week the Parliamentary Committee of the Lancashire County Council had before them the petition of the inhabitants of Urmston for an order of the Council constituting that township an urban sanitary authority. The district of Urmston is mainly a rural one, with a population of about 4000 at the last census and a rateable value of not more than £21,000. The people of Urmston believe that the administration of the district would be greatly improved under a local board, although they adduce no evidence to prove that this would be so; they appear to have been greatly exercised by the fact that the ratepayers of Urmston have only one representative on the existing authority, and attribute to the negligence of that authority the necessity which has recently arisen for the expenditure by the township of a sum of £3000 for the provision of a cemetery. After a patient hearing, the chairman—who, by the way, is a barrister of experience—announced that the committee could not recommend to the County Council the granting of the petition; in the first place, because the petitioners had failed to show that they had been otherwise than equitably governed by the existing authority; and secondly, because there was every likelihood that district councils would shortly be established, and the committee were unwilling to increase the difficulty of the Government in dealing with the whole subject of district councils by establishing a new sanitary authority for a small district like Urmston.

The Health of Manchester.

According to the last issued return the health of Manchester has been favourable during the three months ending with September last. The gross death-rate did not amount to quite 20 per 1000, a rate which has seldom been achieved in Manchester for so long a period as three months together. The coolness of the autumn has kept in check infantile diarrhœa, which in ordinary years accounts for a considerable fatality in Manchester. Of zymotic diseases, scarlet fever has shown the usual autumnal rise during the quarter, but the disease has not been nearly so prevalent here as in the metropolis. Small-pox has been reported to be present in thirteen instances, the patients having been imported from one or other of the neighbouring towns where the disease has lately been prevalent.

Eccles and Incorporation.

The local board district of Eccles has recently received a charter of incorporation, and will for the future be governed by a mayor and corporation. Last week the newly elected council met for the first time in the Eccles Town Hall amidst a considerable flourishing of trumpets. The first mayor is a local gentleman who appears to have won his laurels as a member of the local board, and who, if one may judge from the newspaper version of his speech on this occasion, is determined that the new corporation shall not hide its light under a bushel. The first formal business at the meeting was to declare the old local board dissolved. After this the clerk of the board was duly inducted into the office of town clerk, and the various other officers were appointed. The new corporation will have plenty of work before them for some years to come. The district of Eccles is really a suburb of Manchester, and most of the residents there have their places of business in the city. The health of Eccles, according to the reports of the late local board, has not always been what it might be, and the corporation will do wisely in seeking out and removing any causes of ill health which may exist in this important and rapidly increasing town. The building by-laws of Eccles, like those of many other local boards, might be improved with advantage; and if the corporation could be induced to replace them entirely by the admirable model code of the Local Government Board, as has been done in Manchester, everybody except the jerry builders would be the gainers. With regard to the question of hospital provision for infectious diseases, the new borough is most fortunately circumstanced; for instead of being obliged to incur the serious expense of erecting and supporting a separate hospital of their own, they have one on their very boundaries in the splendid new sanatorium recently erected at Ladywell by the Salford Corporation. This institution, as it is one of the most recent, is likewise one of the very best fever hospitals in England; it contains about 200 beds and abundant space for extension in the event of an epidemic of extraordinary proportions. The disinfecting arrangements at the hospital are of such excellent design and on such an ample scale that the Eccles Corporation will do wisely in endeavouring to arrange with Salford for the isolation of patients and the disinfection of bedding &c. at the Ladywell sanatorium.

Manchester, Nov. 22nd.

LIVERPOOL.

(FROM OUR OWN CORRESPONDENT.)

The New Mayor and the Hospitals.

MR. R. D. HOLT, the newly elected mayor of this city, following the example of his predecessors, paid a visit to the Infirmary for Children on the 13th inst., the first Sunday after his election, and on the following Sunday attended morning service at St. Barnabas Church. Here a sermon was preached by the Rev. Canon Acheson of Chester, and a collection was made for the funds of the Royal Southern Hospital, which amounted to £84. The mayor, with some of the aldermen, city councillors, and members of the congregation, then went to the hospital, which is within a short distance of the church. They were met by members of the committee and medical staff and visited some of the wards.

Small-pox and Vaccination.

The proximity of Warrington, where small-pox has for weeks past been epidemic, to this city led to fears that the disease might spread here, there being much traffic between the two places. Some few cases of small-pox have occurred here in lodging-houses, but they have been promptly diagnosed and removed to hospital. At the present time the epidemic is said to be subsiding in Warrington. The disease has appeared in St. Helens, and some trouble was experienced in inducing one patient to submit to removal to hospital. Liverpool has its full share of anti-vaccinationists, who have disseminated much mischievous literature among the poor and uneducated. It is also much to be lamented that many vaccinations are performed by the surgeons to cheap dispensaries and that so many practitioners content themselves with two or even one vesicle, to please the children's mothers. It has been calculated that there are in Liverpool at any given time 40,000 unvaccinated persons, including infants under three months. It is therefore most desirable that both vaccination and revaccination should be efficiently performed. A certain proportion of persons are revaccinated, but it is very much smaller than it should be.

The Head Constable's Annual Report.

The annual report of Captain Nott Bower, the head constable, which has been recently published, deals with the crime of the city and the state of the police establishment for the year ending Sept. 29th, 1892. It is a document which affords many valuable details of interest to medical readers. Among these are the statements that 359 members of the force received rewards for skill in rendering aid to sick and injured persons upon being commended by the surgeons of the various hospitals, while five constables received medals, two silver clasps, and two certificates from the Humane Society for saving life from fire or

drowning. One constable received an illuminated address from the Society for the Protection of Life from Fire, and two constables received—the one a bronze medal and certificate, and the other a certificate, from the Grand Priory of the Order of the Hospital of St. John of Jerusalem in England for gallantry in stopping runaway horses, the presentation in the two latter cases being made by H.R.H. the Prince of Wales. The certificate of the St. John Ambulance Association of qualification to render first aid in cases of sickness or accident is now held by 570 members of the force.

The Police and the Social Evil.

During the last two years proceedings have been taken against the keepers of all houses which can be proved to be brothels. A total of 727 persons were thus dealt with in the last year, and it is a proof of the terrible persistence of this evil and of the reluctance of the keepers of these houses to betake themselves to some other calling that 131 of these persons had been previously convicted once, 40 twice, 15 thrice and 2 four times. The results of the proceedings were that 76 were imprisoned, 461 were fined, 57 bound over to appear if called upon, 1 committed for trial, 54 absconded, 48 cases dismissed and 23 summonses were withdrawn. While it is satisfactory to state that some of the streets, formerly almost wholly tenanted by this class of persons, have been cleared of them and are more respectably tenanted, it is also to be observed that the evil shows signs of being scattered rather than extinguished. Captain Bower observes that of 19 cases in which summonses were issued against owners or agents of property, in 4 only have convictions followed. This he attributes to the practical impossibility of obtaining such evidence as will prove "knowledge," Section 3, Subsection 3, of the Criminal Law Amendment Act thus proving of little or no avail.

A Year's Inquests.

During the same year inquests were held upon 957 bodies, and 706 other deaths were reported to the coroner by the police and others, thus making a total of 1663 cases investigated by the coroner during the year. In the 706 cases only informal inquiry was made. Among the inquests were 51 cases of suicide, 338 of accidental death, 161 of infants "suffocated while in bed with their parents," "found drowned" 25, "executed" 1, "died from excessive drinking" 164, "natural causes" 119.

Nov. 22nd.

NORTHERN COUNTIES NOTES.

(FROM OUR OWN CORRESPONDENT.)

Newcastle Hospital Sunday Fund.

THE success of the Newcastle Hospital Sunday Fund this year is shown by the hon. treasurer's third list, just published, which amounts to a little over £3000 and is an increase of about £100 over the same lists for last year. This cannot but be considered satisfactory by all who take an interest in this valuable fund.

North of England Microscopical Society.

At the last meeting of the North of England Microscopical Society, held in the Natural History Society's museum in Newcastle, Mr. John Brown gave a most interesting and instructive lecture on various microscopical objects with demonstrations, in the course of which he mentioned the names of many connected with Newcastle and district, such as the Hancocks, Bradys, Alders, Attheys and others who had advanced the study of the microscope and natural history pursuits. He also alluded to the veteran Dr. Embleton, who was the first, about sixty years ago, to bring a microscope of any power to Newcastle.

Trial for Murder at Carlisle.

At the Carlisle Assizes last week George Bruce was tried for the murder of his wife at Whitehaven in August last. Bruce was a miner, and while digging in his garden his wife went to help him. He struck her on the head with the spade, fracturing her skull and killing her on the spot. Prisoner admitted his guilt, but the medical evidence of Drs. Campbell and Harris showed that he was subject to monomania and delusions, Dr. Harris having in the April before the murder recommended restraint. The judge, in summing up, alluded to the medical evidence and to Dr. Harris's recommendation in April, which was not carried out, and said that anyone who knew the difficulties which medical men had to contend with would not feel surprised that the prisoner was not locked up then. Actions were frequently brought against doctors, and they knew that no one was so clever as men or women who had been out of their mind. The prisoner was found guilty and ordered to be kept in confinement during Her Majesty's pleasure.

Death of Mr. Charles Arnison, J.P.

The news of the death last week of Mr. Charles Arnison, surgeon, of Stanhope was received at Newcastle with much regret, where he was well known and highly respected. Mr. Arnison was in his eighty-fourth year and first qualified so far back as 1834. He belonged to a well-known medical family and was a son of Dr. Christopher Arnison of Allendale and Alston, whom he succeeded; but on the death of his brother, Mr. George Arnison, in 1866, he removed to Stanhope, where he practised until a few years ago, when he retired; but he continued to take an interest in local matters, and was a liberal supporter of schools, local benevolent societies, and indeed all charitable organisations in Weardale. For several years he has sat as a magistrate on the Stanhope and Wolsingham benches. He has left a widow and one daughter. The funeral took place on Saturday last, and was largely attended by the Dalesmen and by many members of the profession.

Excise Prosecution of a Medical Man.

At Norton, near Malton, last Saturday, a case of some importance to the profession was decided at the sessions there. The medical officer of health for the district was prosecuted at the instance of the Excise for keeping a male servant without a licence. He had engaged a lad to look after his pony, but it was contended that he was not liable for tax, as the lad did not sleep on the premises, and also did other work for which he was paid. The Excise officer contended it was a test case, but the bench dismissed the case and ordered costs against the Excise, including fee for defendant's solicitor.

Ambulance Work in South Shields.

At South Shields, at an ambulance demonstration last week, Surgeon-Major Hutton made presentations to the two policemen who succeeded in restoring to consciousness two boys who were nearly suffocated by gas in a bath room under circumstances mentioned in one of my previous letters.

The Darlington Public Vaccinator and the Royal Commission.

At a recent meeting of the Darlington Board of Guardians the Public Vaccinator raised the question of the suspension of the Vaccination Act pending the report of the Royal Commission on the Act. He pointed out that this affected his position, as in two successive weeks he had only to vaccinate two persons in the first and one in the last week, and that the successful vaccinations, which were formerly 83 per cent., had fallen to 55 per cent. If vaccinations were not enforced he must ask for an increase of remuneration to compensate for loss. It was stated that at the next meeting a resolution would be moved rescinding the suspension of prosecutions.

A death through lead poisoning took place on Saturday last at the Newcastle Royal Infirmary. The patient was a female, aged seventeen, who had worked at the lead works on the Tyne. She had a fit three days before she died and never regained consciousness.

The Denton Holme Nursing Association, Carlisle, has received the generous gift of £70 a year for ten years to provide an efficient nurse for a poor district in the city of Carlisle.

Newcastle-on-Tyne, Nov. 23rd.

SCOTLAND.

(FROM OUR OWN CORRESPONDENT.)

The Edinburgh University Court.

AT the meeting of this Court last week it was resolved that the fees for the professional examination for the degrees of M.B. and Ch.B. under the new Ordinance of Medicine should be apportioned as follows:—The fee for the first division of the examination to be £6 6*s.*, and that candidates who only appear for two subjects shall pay £3 3*s.*, and an additional £3 3*s.* when they appear for the other two subjects. The fee for the second division to be £6 6*s.*, and candidates who defer to appear for Materia Medica and Therapeutics shall pay £4 4*s.* for the first stage of the examination and £2 2*s.* for the

second. The fee for the final division is also £6 6s., and candidates who fail to pass either in the whole or in one or more of the subjects in any division of this examination shall pay £1 1s. for each subject in which they have failed before they can be readmitted to examination in that subject.

The Jubilee Institute of Nurses.

A supplementary sale of work in connexion with this institute was held in the Nurses' Home, Edinburgh, last week. Lady Helen Munro Ferguson, in opening it, said that the idea of nursing the sick poor in their own homes was one of the great movements of the present time. It completed the great hospital system of the day, and it would be difficult to over-estimate the benefit the Institute had already been to the sick poor.

Royal Physical Society, Edinburgh.

The first meeting of this Society was held last week, when Dr. Symington, lecturer on anatomy in the School of Medicine and one of the Vice-presidents of the Society, delivered his valedictory address, taking for his subject the "Cerebral Convolutions of the Primates." He traced the history of our knowledge from the earlier anatomists to the present day, and pointed out the great practical advantages which had followed upon a more intimate knowledge of the surface markings of the brain, and then of the physiology of some of its parts. The lecutre was illustrated with drawings and copies of Professor Cunningham's casts of the brains of several of the Primates.

Health Statistics.

For last week the returns of notified cases of zymotic diseases were: Measles, 457; scarlet fever, 26; diphtheria, 5; whooping-cough, 3; erysipelas, 9; being a total of 500 cases, a decrease of 59 as compared with the previous week.

Health of Aberdeen.

During October there were 213 deaths in the city of Aberdeen, a death-rate of 19·73 per 1000. In September the rate was 16·36, while last October it was 19·25. The mean age at death was 27·1 years. There was a great increase of the mortality among young children, due to the epidemic of measles—1515 cases of measles were reported during the month, as against 307 in September and 63 in August. The mortality, however, only amounted to 2·1 per cent. of the reported cases, which is less than half the usual mortality. The cases of scarlet fever still continue to increase in number, 222 having been reported in October as against 121 in September. Diphtheria was also more prevalent.

Aberdeen Medico-Chirurgical Society.

The annual general meeting of this Society was held on Thursday, the 17th inst., when the following were elected office-bearers for the year:—President, Dr. Angus Fraser; vice-president, Professor Stevenson; secretary, Dr. George Edmond; recording secretary, Dr. G. P. Ferdinands; treasurer, Dr. John Gordon; librarian, Dr. G. Rose. Council—Professors Cash and Finlay, Drs. Dalgarno, Rodger and Garden.

First Meeting.

At the first meeting of this Society for the winter a presidential address was delivered by Dr. R. J. Garden on "Medical Charities: their Functions and Correlations." Dr. Garden, after mentioning the importance of the subject, referred in detail to the working of the various medical charities in Aberdeen and advocated some changes in their management.

Nov. 16th.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

Dublin University Biological Association.

THE opening meeting of the Association will be held on the 24th inst. The President, Dr. Beatty, will deliver an address upon "Functions of the Glands of the Skin." The meeting will be addressed by Dr. Walter Smith, President of the Royal College of Physicians, and Dr. Purser.

Graduates' Union: Royal University.

A meeting of the graduates was held last week to discuss a project for the formation of a graduates' union. Mr. Purcell, in moving that the time had arrived for the founding of a Royal University Union, said that such unions were the rule in all residential universities, and their necessity was much greater in the case of a university such as the Royal, where there were not many opportunities for graduates to meet to take an interest in their University, and to exert a useful influence on its future. The motion was passed, also a resolution to the effect that a provisional committee of graduates be formed to inquire into the prospects of forming a graduates' union.

Health of Dublin for October.

As compared with the previous month, there was a considerable decrease in the mortality caused by infectious diseases. The zymotic death-rate, which was 3·77 per 1000 in September, fell to 1·5 in October. There was a slight increase in the fatal cases of scarlet fever; but a great decrease in the mortality ascribed to diarrhœa, probably due to the lowering of temperature, which was 4·2° below the average. As to the general death-rate, it was 1·42 below the average of the corresponding month for the previous ten years.

Alleged Insanitary Condition of the Hibernian Military School, Phœnix Park.

It has been stated that the drainage arrangements of this institution, which accommodates some 500 inmates, are in a deplorable condition and that an outbreak of typhoid fever has taken place. As regards the disposal of sewage, the process used is one in which the sewage is mixed with carbolic acid and lime and distributed over an adjoining field. Some of the boys are said to have suffered from a mild form of "gastric" fever, most probably typhoid, and Sir C. Cameron inspected the place on Saturday last and will shortly report on the matter. It must be mentioned that the health of the boys has usually been good and the death-rate exceptionally low.

Cholera Huts on Kingstown Pier.

At a recent meeting of the Kingstown Commissioners a communication was received from the Board of Public Works withdrawing their objections to the site on the West Pier for cholera huts, in the event of an outbreak of the epidemic next autumn, upon the following conditions: "(*a*) That the arrangement is to be a purely temporary one, and to last for one year as a maximum. (*b*) That the responsibility and risk of erecting a cholera hospital in a place regarded as so unsuitable by the Board rest entirely with the urban sanitary authority. (*c*) That permission is conditional on the Town Commissioners at once proceeding to exercise their compulsory powers for the acquisition of a site for an isolated hospital, as recommended by the Medical Superintendent Officer of Health, for treatment of infectious diseases, so as to avoid the necessity of having recourse, after the threatened emergency has passed, to the objectionable scheme now contemplated." It appears that the time has passed for this year during which the statutory notices for obtaining land by compulsion should be published; but the Commissioners have promised to do all in their power between this and November next to obtain a site before resorting to compulsion.

The Ulster Medical Society: Annual Dinner.

The annual dinner of the Ulster Medical Society was held in Belfast on Nov. 17th, when there was a very large number of members present. The President, Dr. Whittaker, medical officer of health for the city, occupied the chair, and amongst the guests were the Lord Mayor (Sir Daniel Dixon), the President of Queen's College (Dr. Hamilton), Dr. Walton Browne (President of the North of Ireland Branch of the British Medical Association), Surgeon-Colonel Preston, Brigade-Surgeon Howard, Surgeon-Major Bigger, Fleet-Surgeon Wheeler and Professor S. Dill, M.A. After the usual loyal toasts of "The Queen" and "The Prince and Princess of Wales" had been given, the President proposed "The Lord-Lieutenant and Prosperity to Ireland," which was responded to by Professor Whitla, M.D. Dr. M'Keown proposed "The City of Belfast," to which the Lord Mayor replied. "The Queen's College and the Belfast Medical School" was given by Brigade-Surgeon M'Farland, and President Hamilton, D.D., and Mr. John Fagan responded. "The British Medical Association and the North of Ireland Branch" was proposed by Dr. Dempsey and responded to by Dr. Walton Browne and Dr. Byers. Dr. Lindsay gave "Our Guests," and Surgeon-Colonel Preston and Professor S. Dill, M.A., replied. "The Ulster Medical Society" was proposed by President Hamilton, D.D., and Dr. Whittaker (President) and Dr. M'Caw (secretary) replied. Through the kindness of Dr. M'Caw, Dr. Mackenzie, Dr. Lindsay, Brigade-Surgeon Howard, Dr. M'Kisack, Dr. Leslie and Dr. Lewers, an admirable programme of music was provided. The dinner, which was one of the largest medical *réunions* ever held in Belfast, was

a decided success, and this was in great measure due to the exertions of the popular secretary of the Society, Dr. M'Caw.

Belfast Royal Hospital.

The annual meeting of the supporters of this charity was held on Monday last, and from the report presented by Dr. Whitla, honorary secretary of the medical staff, I learn that 2455 intern cases were treated during the year ending Aug. 31st, 1892, the largest number ever treated in any year of the hospital's existence. Of these, 998 were medical and 1457 surgical cases. The mortality, excluding the moribund cases in the medical wards, was 5·8 per cent., and 2·7 per cent. in the surgical wards, giving an average mortality of 3·9. In the extern department 20,293 cases were treated during the year. Of these, 5001 were medical and 15,292 surgical. There was an average daily attendance of 180. During the winter session 171 students received clinical instruction, and during the summer 106. A very satisfactory financial statement was presented. The year commenced with a debt of £2203 15*s.* 6*d.* The expenditure for the year was £8789 9*s.* 7*d.*, and the receipts from all sources £15,207 18*s.* 5*d.* The receipts, therefore, exceed the debt and expenditure by £4214 13*s.* 4*d.*, and of this sum £3800 has been invested, leaving a balance of £414 13*s.* 4*d.* in the hands of the treasurer. This most satisfactory result is due to some large bequests and to the Centenary Bazaar, which realised £3588 11*s.* 2*d.* The receipts from the working men show an increase of £93 7*s.* 3*d.* The Chairman of the Board of Management (Mr. W. H. Dixon) said, at the meeting, that it was an open secret in Belfast that the Hospital Committee were endeavouring to acquire the premises of the Belfast Charitable Society for the site of a new hospital. On the previous Saturday the committee of the Charitable Society had come to the conclusion as to the terms on which they would sell to the Hospital Committee, and when it was shown that the people of Belfast were prepared to avail themselves of what was undoubtedly the best site for a hospital in the city, without any detriment to the Charitable Society, the matter would, doubtless, be concluded.

Mr. Charles Lloyd Cowell, L.R.C.S.I., has been elected house surgeon to Monkstown Hospital for six months from Dec. 1st.

Nov. 22nd.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

Medical Students v. *Town Councillors.*

THE Prefect of the Seine and the rest of the venerable City Fathers, sitting in solemn conclave at the Hôtel de Ville on Saturday last, were considerably astonished by the sudden appearance within that stately edifice, at 5 P.M., of an excited crowd of 300 students of the Faculty of Medicine, crying at the top of their voices "Conspuez Strauss!" "Conspuez Peyron!" the gentlemen named being respectively a well-known municipal councillor and the director of the Assistance Publique. Neither M. Strauss nor M. Peyron putting in an appearance, the young people betook them to the Faculty of Medicine, where, in conformity with their request, they were, to the number of 400 or 500, admitted into the large amphitheatre. Two lamps were lit, and Professor Brouardel, the Dean, appeared, and strongly recommended them to keep cool and to refrain from violence, promising to do his utmost to give them satisfaction in the matter in dispute. The assembly then quietly dispersed. What was the cause of the disturbance? It appears that one day recently M. Strauss, with his colleagues of the fifth commission, which exercises supervision over the Paris hospitals, was paying his usual visit to the wards of the Hôpital St. Antoine. In one of the wards, which was only partly filled with patients, they came upon three *externes* in the empty part of the room. Each wore his hat, and one was smoking a cigarette. As they took no notice of the members of the Commission the hospital superintendent, who accompanied them, informed the students of the quality of the visitors. The hats and the cigarette still remaining *in situ*, M. Strauss reproved the young gentlemen, with the result that two of them uncovered, while the third, M. Salmon, continued to smoke and to wear his hat. Result: decree of expulsion issued by M. Peyron against M. Salmon. Common cause was then made with the expelled one by the whole body of students, and it was determined to prevent the holding of the usual competitive examinations for the *externat* and the *internat* unless M. Salmon was restored to his duties. When the students invaded the Hôtel de Ville they had already successfully obstructed the proceedings at the examination for the *externat*. On Monday last the same tactics were pursued at the examination for the *internat*, which, accordingly, was not held, the examiners retiring. Pouring out of the examination room in the Avenue Victoria into the neighbouring Place de l'Hôtel de Ville they were chased by a squad of police as far as the Place St. Michel, whence they repaired to the Faculty, where they were again addressed by the Dean, who, by the way, is extremely popular. Notwithstanding the announcement that the examinations are postponed until further notice, the manifestations recommenced again yesterday morning at the Assistance Publique and before the Hôtel de Ville, and at the Faculty, where M. Weiss's lecture on Physics had to be abandoned. Meanwhile M. Salmon, on expressing his regret for his conduct, has had his punishment reduced to suspension until Jan. 1st; but this does not satisfy the body of students, who are resolved to support their comrade *à outrance* and also to agitate against municipal interference in the wards of hospitals. They maintain that they are not bound to take any notice of persons other than their chiefs who may visit their wards. As to smoking in the wards, that is a practice that is tolerated, and both patients and *personnel* smoke with impunity out of working hours. I myself have repeatedly seen professors smoke cigarettes at the end of the morning visit. It is also a subject of complaint that the *externes* of all hospitals except remote ones, such as St. Louis, Tenon, Lariboisière, &c., are not paid for their services. Professor Brouardel received on Monday a deputation of *internes* and *externes* of the St. Antoine Hospital. It was understood that a report formulating the demands of the students should be presented to the Dean. At a monster meeting of 1800 students held yesterday at the École Pratique of the Faculty, a petition embodying the following demands was approved: (1) recall of M. Salmon; (2) establishment of a special jurisdiction for the solution of any disputes that may arise amongst the medical *personnel* of the hospitals. Another meeting is fixed for Thursday, in order to determine the advisability of a general strike of *internes* and *externes*.

Passing of the New Law Regulating the Practice of Medicine.

Some time ago I acquainted the readers of THE LANCET with the principal provisions of the above law. At to-day's sitting the Senate finally adopted it, and it will forthwith come into operation. The only clause not adopted is that dealing with the prohibition of the simultaneous exercise of the profession of medicine and the art of pharmacy. That question will for convenience be dealt with when the new Pharmacy Act is discussed.

Paris, Nov. 23rd.

BERLIN.

(FROM OUR OWN CORRESPONDENT.)

Professor Pettenkofer's Experiment.

IN his lecture at the University on the 17th inst. Professor Virchow spoke as follows: "It has repeatedly happened that diseases have been erroneously ascribed to micro-organisms. This was the case with the fermentation fungus, for example, till its harmlessness was demonstrated by experiments on animals. As to the importance of local circumstances emphasised by Pettenkofer, it has been by no means ignored; but local disposition is not the only important thing. From the circumstance that one part of the earth is covered by a pine forest, another by a fir forest, one may indeed infer a special disposition of these parts for the vegetation in question; but these trees flourish in other places too; the main thing is that the bearers of life—germs, seeds and spores—get there. And so it is with cholera and cholera bacilli. These latter are the main thing, and they find in some organisms the conditions most favourable to the engendering of cholera, whereas they pass others by uninjured. The bacilli, therefore, are really the cause of the disease, but they alone do not produce it. They are not the disease itself; on the contrary, the disease consists in the reactions produced by them under favourable circumstances." In an interesting criticism of Professor Pettenkofer's views, addressed to the *Vassische Zeitung* of Berlin, an anonymous medical writer quotes Professor Koch's opinion that more than 50 per cent. of mankind are naturally immune against cholera.

"Natural Photography."

At last week's meeting of the Berlin Medical Society Dr. Lassar showed life-size photographs of heads. Hitherto

it has been technically impossible to photograph the human face in its natural dimensions. Only the indirect enlargement of objects by means of lenses was practicable. This difficulty has now been got over by Eugen Haak of Stuttgart, who has invented a new way of using the magnesium light. He uses a "lightning cartridge," which gives a very powerful light, extinguishable by means of an electric fuse in the tenth part of a second. This so-called "natural photography" produces impressions of extraordinary accuracy, but requires great skill and practice, and is still very expensive. As yet it is practised by only one photographer in Berlin. Dr. Lassar proved the accuracy of the photographs shown by him by exhibiting the patients from whom they had been taken. Some of the morbid changes were even more recognisable in the photographs than in the patients themselves.

The Prussian Medical Calendar for 1893.

The *Prussian Medical Calendar* for 1893, published by Hirschwald of Berlin, with the sanction of the Minister of Ecclesiastical, Educational, and Medical Affairs, does not differ in outward appearance from those of former years. The first part, which contains not only the calendar, but also excellent notices regarding medical apparatus and prescriptions and a diagnostic manual, is by Medical Counsellor Wernich. The second part consists of the official orders that have been issued this year with reference to medical affairs and a list of all the medical men practising their profession in Germany.

Berlin, Nov. 22nd.

VIENNA.

(FROM OUR OWN CORRESPONDENT.)

Cholera in Austria-Hungary.

A BOATMAN who had arrived on a Danube steamer on Nov. 2nd from Raab (Hungary) and who had not left his vessel during his six days' stay, died from cholera sicca on Nov. 8th, without showing any symptoms of sickness even the day before his death; since that date no other case of cholera has occurred in Vienna, and the cholera hospital was closed last week. The total number of cholera cases recorded was four, of which number three died and one recovered, but in two of the cases the clinical symptoms and intestinal pathology differed from those of ordinary cholera Asiatica and the diagnosis of the cases was based merely on the presence of the comma bacillus. In Galicia the cholera has disappeared in the district of Cracow, and the restrictions on the traffic in this province have now been removed. Official statistics show that 865 cases of cholera have been notified to the municipality during the month of October, but 185 cases of these were proved not to have been cholera. The mortality among the remaining 680 cases of real cholera Asiatica was 57 per cent. At the commencement of the epidemic the mortality was extremely high—over 80 per cent. A favourite remedy in some of the hospitals was the internal administration of chloroform, which proved of benefit in some cases in the vomiting. Mustard baths and the internal use of an extract of onions and of allylsulphide were also tried without any significant effect.

The Microbes of the Danube Water.

In the Hygienic Institute of the Vienna University the water of the Vienna Danube Canal was examined bacteriologically by Dr. Heider, Professor Gruber's assistant, some weeks ago. He found two species of vibrio-like bacilli, similar in their microscopical appearance to the comma bacillus. One of these bacilli exhibited the same reaction in its cultures as the comma bacillus. The vibrio of Dr. Heider showed clearly, if cultivated in 1 per cent. peptone-water, the cholera-red test acting by reducing Ktmus-bouillon within twelve hours, and producing a brown pellicle on potatoes, thus rendering it indistinguishable from the growths of the comma bacillus. During the first twenty-four hours the gelatine plates inoculated with Heider's vibrio resembled those inoculated with Koch's comma bacillus. Later on there was a difference to be observed between the vibrio cultures and those of the comma bacillus, the former being darker and the culture mass being more equally distributed throughout the liquefied gelatine. Test-tube cultures of Heider's vibrio differed only in the quicker growth and the more equable and more pronounced opacity in the appearance produced by the comma bacillus.

Vienna, Nov. 20th.

Obituary.

GEORGE ROSS, A.M., M.D.

DR. ROSS, Vice-Dean Faculty of Medicine, McGill University, Montreal, and Professor of Practice of Medicine, died on Nov. 8th, 1892, aged forty-seven. He was well known as a consultant throughout the whole Dominion of Canada, and as a clinical teacher his reputation was unequalled. He was a most acute diagnostician, and his method of teaching was somewhat like that of the late Dr. Murchison. He had been President of the Canadian Medical Association and of the Montreal Medico-Chirurgical Society. Although possessed of excellent literary ability and editor of the *Montreal Medical Journal*, he was not a prolific writer, his contributions consisting chiefly of papers read before the various societies. His article on Aneurysm, written for the "Reference Handbook of the Medical Sciences," has attracted much attention in America. Dr. Ross was a clear and forcible speaker and a very popular lecturer. He will be much missed, and his University will have difficulty in replacing him. No less than three Professors of Medicine have died within the last three years—viz., Drs. Howard, McDonnell and Ross.

ROBERT ZACCHEUS PITTS, M.R.C.S., L.S.A.

BY the premature death from typhoid fever on the 9th inst. of Mr. R. Z. Pitts Chelmsford has lost one of its ablest practitioners—one whose character and genial manners had endeared him to every class of the community. Born at Hingham, Norfolk, in 1850, Mr. Pitts received his medical education at the Middlesex Hospital, where he was a most successful student, and in which he held, in 1872-3, the offices of house surgeon and house physician. On leaving London he was appointed house surgeon to the West Herts Infirmary, Hemel Hempstead, a post held by him for about five years, and in this place he made many life-long friends. In June, 1879, Mr. Pitts went to Chelmsford, succeeding to the practice of Dr. Orpen of that town. In spite of his ever-youthful appearance, Robert Pitts made his way in practice with remarkable rapidity. He possessed in an eminent degree all those qualities which are essential to success. Thus, in the first place, he had a great love for his profession; and, in the next, he was never idle. Skilful and full of resource, and notably self-reliant, he was always sympathetic and good-natured, earning the affection of his patients and disarming all rivals. A great lover of natural history and of English literature, Mr. Pitts had for some years occupied his leisure in the study of ornithology, and in collecting specimens and books bearing on the subject. Still, he never had much leisure—for he died in harness—and may have naturally looked forward to a less busy time when he could have devoted more attention to extra-professional pursuits. During his fatal illness he was attended by his partner, Mr. Holland, and by his friend and former fellow-student, Dr. Sidney Coupland, of the Middlesex Hospital. The feeling in Chelmsford at his death found eloquent expression in the sermon preached at Holy Trinity Church by the rector, the Rev. A. Cyril Pearson, in the tributes in the local press, and, above all, in the large and representative gathering at the funeral on the 12th inst. He leaves a widow and five children to mourn their loss, but his family and friends have the consolation that his life, comparatively brief as it was, was spent in the service of his fellows, that it was marked by sterling rectitude, and was, moreover, full of the happiness which comes of the consciousness of work well done.

FRANK GILPIN, M.R.C.S., L.S.A.

AT the early age of twenty-seven and after barely two years' experience of the duties and responsibilities of a professional career Mr. Frank Gilpin, medical officer of health for Stratford-on-Avon and district, died on the 16th inst. from typhoid fever. Mr. Gilpin, who was unmarried, was a former student of the Middlesex Hospital, where he was a general favourite and where his excellence in the cricket and football fields is doubtless known to many outside his own school. He was appointed to the post of medical officer of health at the end of 1890 and soon showed his fitness for the duties pertaining thereto. It has been pointed out that it was owing to his exertions that a fever hospital has been erected at Loxley and that what threatened to be a severe epidemic was averted. During his illness, which was probably contracted in the discharge of his duties, he was attended by Messrs. Nason and Norbury,

as well as by his brother, Mr. R. H. Gilpin of Evesham, and also by Dr. Cayley of the Middlesex Hospital. It is seldom that we have the mournful task of recording the abrupt termination of a career just after it had opened with so much promise.

G. W. RHODES, M.R.C.S., L.S.A.

THE death is announced of an old Huddersfield practitioner—Mr. George W. Rhodes—at his residence, Queen-street South, on the 22nd inst. He was an honorary surgeon of the Huddersfield Infirmary and had been president of the Huddersfield Paxton Society. In all local improvements he took a great interest, especially in educational matters. The deceased gentleman was in his sixty-ninth year.

THOMAS WILTSHIRE, L.R.C.P. EDIN., L.F.P.S. GLAS., &c.

WE announce with regret the death of Mr. Wiltshire of Tunbridge Wells, aged fifty-six. About twenty-eight years ago he succeeded to the practice of Mr. Tinsley, a leading and respected surgeon at Sheffield. By dint of hard work and devotion to his profession he succeeded in retaining one of the largest practices in the north of England until about five years ago, when he retired. He never tried for any medical appointments, nor did he interfere with public affairs. He was simply devoted to his profession as a surgeon. He was well liked by the members of his profession, and was beloved by his patients and friends. During the winter of 1890-91 he suffered severely from an attack of influenza, from which he never completely recovered.

HENRY MOON, M.R.C.S., L.D.S.

WE have to record the death of Mr. Henry Moon, late dental surgeon to Guy's Hospital, at the age of forty-seven. He was born at Tottenham, Middlesex, and was the son of Mr. William Moon, a gentleman in large general practice there. He was for a time educated at Bruce Castle, but, being of delicate constitution, he had private tutors at home, but afterwards went to Germany. On his return he entered at Guy's Hospital, but after he had passed it was considered unwise for him to undertake the rough work of general practice, and he devoted himself to dentistry. In a few years he became Vice-President of the Odontological Society, Examiner in Dental Surgery at the Royal College of Surgeons, England, and dental surgeon to the Dental Hospital, London, and on the retirement of Mr. Salter he was appointed dental surgeon to Guy's Hospital and lecturer on dental surgery. He wrote the article on Dental Surgery in "Bryant's Surgery," besides many papers in the Odontological Reports and in the Journal of the British Dental Association. About four years ago his health began to fail, and after much urging he went to New Zealand, where he improved for a time, when family affairs brought him again to England; but his health again gave way, and he died on Nov. 14th. Of gentle, kindly manner, most conscientious, generous, and thoroughly reliable, it was no wonder to his friends that he succeeded in private practice as rapidly as he did in his public position.

Medical News.

UNIVERSITY OF LONDON.—The following candidates have passed the recent M.B. Examination:—

First Division.—Christopher Addison, Arthur Seal Blackwell, B.Sc., Wm. Black Jones, H. T. Parker, Walter Ley Pethybridge, B.Sc., and C. E. Wheeler, B.Sc., of St. Barthol.'s Hospital; Louisa B. Aldrich-Blake and Mary Ellen Rye, of the London School of Medicine and Royal Free Hospital; Hamilton Ashley Ballance, Arthur Douglas Heath, John Jones, Cecil Benjamin T. Musgrave, Martin Randall, B.A., Edmond Wallace Selby, Hugh Roubiliac Smith, Chas. George Spencer, Geo. Arbour Stephens, B.Sc., and Frank W. Wesley, of University College; Chesman Barker, of the Sheffield Medical Institution and St. Bartholomew's Hospital; Wm. Bligh, Francis Jordan Coleman, Arthur Mantell Daldy, C. Caldwell Elliot, Stephen G. Floyd, Edwd. T. E. Hamilton, B.Sc., C. Satchell Pantin, Arthur John Sharp, and T. Robinson Taylor, B.Sc., of Guy's Hosp.; Chas. Richd. Box, B.Sc., W. P. Purvis, B.Sc., and Seymour Graves Toller, of St. Thomas's Hospital; Albert Edward Brindley and Richard Hamilton, of Owens College and Manch. Royal Infirmary; Thomas Grigor Brodie, Henry Stephen Sandifer, and Arthur Whitfield, of King's College; John Evans, of the Univ. Colleges of Liverpool and London; Jessie Flewitt Hatch, of the London School of Medicine for Women; Vincent Warren Low and Leonard Rogers, of St. Mary's Hospital; J. Saint Johnston, Sidney Herbert Perry and Thos. Major Tibbetts, of Queen's College, Birmingham; Wm. James Procter, of the London Hospital and University College; Frank Allan Roberts, of Yorkshire College; Clement Michael Rogerson, of Yorkshire College and General Infirmary, Leeds.

Second Division.—Herbert Stanley Ballance and Howard Distin, of King's College; Robert Henry Cole, of St. Mary's Hospital; Henry Wilkes Gibson, of Middlesex Hospital; Charles Joseph Harrison, of University College; Thos. David Lister, of Guy's Hospital; John Williamson Pugh, of London Hospital; Herbert Ramsden, of Owens College; Henry Eugene Tracey, of St. Bartholomew's Hospital; Stephen Longmore B. Wilks, of Yorkshire College.

SOCIETY OF APOTHECARIES OF LONDON.—The following candidates have passed in the subjects indicated:—

Surgery.—C. K. Batchellor, Queen's College, Birmingham; W. E. Barker, Owens College, Manchester; S. A. Clarke, Middlesex Hospital; H. E. Cooper, St. Thomas's Hospital; H. S. Elliott and N. Elrington, St. George's Hospital; V. P. Foote, Charing cross Hospital; W. E. Gibbs, Durham; F. G. Hargraves, London Hospital; C. S. Lewis, St. George's Hospital; O. H. A. Maggs, Charing-cross Hospital; A. Marshall, St. Thomas's Hospital; G. H. Nowell, Cambridge University and Westminster Hospital; M. Richards, London Hospital; E. Smallwood, Liverpool.

Medicine, Forensic Medicine and Midwifery.—A. Baldwin, Edinburgh; H. A. Beetham and F. G. Dorey, Yorkshire College, Leeds; R. Herd, Cambridge University and Manchester; Jeaffreson, University College; E. G. G. Little, St. George's Hospital; G. Martyn, King's College; G. H. Nowell, Cambridge University and Westminster Hospital; A. B. S. Stewart, Yorkshire College, Leeds; A. T. Todd-White, Guy's Hospital; G. W. Wickham and S. Wimbush, St. Bartholomew's Hospital.

Medicine and Forensic Medicine.—B. E. Church, St. Bartholomew's Hospital.

Forensic Medicine and Midwifery.—H. W. Joyce, King's College; H. E. Mortis, Charing-cross Hospital.

Forensic Medicine.—F. A. P. Arnold, London Hospital; A. H. Hardcastle, Yorkshire College, Leeds; W. E. S. Jones, Guy's Hospital.

Midwifery.—J. E. Bailey, University College; W. Handcock, Yorkshire College, Leeds; J. J. Powell, Cambridge University and St. Thomas's Hospital; A. L. Roper, Cambridge University and Guy's Hospital: J. D. Willis, Owens College, Manchester.

To Messrs. Arnold, Bailey, Baldwin, Batchellor, Dorey, Elliott, Elrington, Foote, Handcock, Hargraves, Jeaffreson, Lewis, Maggs, Mortis, Nowell, Powell, Richards, Wickham, Willis and Wimbush was granted the diploma of the Society entitling them to practise Medicine, Surgery and Midwifery.

UNIVERSITY OF GLASGOW.—The following gentlemen have passed the Examinations mentioned below:—

Doctor of Medicine.—Henry Leslie Graham Leask, M.B., C.M. Scotland; John Rowat, M.B., C.M., Scotland; John Cockburn Syson, M.B., C.M., Scotland.

Doctor of Medicine (Old Regulations).—Daniel M'Neill, L.F.P.S.G., Scotland.

Bachelors of Medicine and Masters in Surgery.—James William Moon Buick, England; Robinson Ruddock Coyle, Ireland; Adam Guthrie Burrell, William Cassels, Farquhar Gracie, Campbell Highet, Alexander Kelso, William Anderson Kirkwood, William M'Call, Archibald Robertson, M.A., James Andrew Robertson, Alexander Marshall Roy, John Barr Stevens, and Charles Stewart, Scotland; George Nelson Turner, South Seas.

ROYAL COLLEGE OF SURGEONS IN IRELAND: DENTAL EXAMINATION.—The following gentlemen having passed the necessary examination have been admitted Licentiates in Dental Surgery of the College:—

Mr. Ernest Catt (Scarborough) and Mr. Louis Benjamin Eskell (Bath).

MEDICAL DEFENCE UNION (LIMITED).—At a meeting of the Local Committee for London held at the offices of the British Medical Association, 429, Strand, on Tuesday, Nov. 3th, 1892, Dr. Danford Thomas in the chair, the following resolution was proposed by Dr. Fancourt Barnes, seconded by Dr. Masters and carried *nem. con.*: "That in the opinion of this committee the best interests of the Medical Defence Union would be served if the office of president of the Union was held from time to time by a metropolitan member." Dr. S. Sunderland and the secretaries of the Union did not vote. The honorary secretary, Dr. Campbell Pope, was instructed to forward the resolution to the central council.

BEQUESTS AND DONATIONS TO HOSPITALS.—The Corporation of London has granted donations of 100 guineas each to the City Dispensary, to the Royal Sea-bathing Infirmary for Scrofula, Margate, and to the Royal Hospital for Diseases of the Chest, City-road; and 50 guineas each to the Royal Ear Hospital, Soho, and the Gordon Hospital for Fistula, Vauxhall Bridge-road.—Under the will of the late Mr. George E. B. Lousada of Hyde Park-terrace, legacies of £50 each are left to the Hospital for Sick Children, Great Ormond-street, St. Mary's Hospital, University College Hospital, and the Jews' Hospital, Norwood.—The late Mr. William Hodgson of Haxby, near York, bequeathed £1000 to the York County Hospital and £500 to the York County Asylum.—The treasurer of the Royal Portsmouth Hospital has received £250 from "a prominent man of business in the town."—The trustees of the Walsall Cottage Hospital have received £53 from an anonymous donor.

HOSPITAL SUNDAY FUND.—The Lord Mayor has received a sum of £100 for the Hospital Sunday Fund as a donation from the late Miss Anderdon.

PRESENTATION.—Dr. Charles Kinsman Rawes of Weston-super-Mare has been presented by the members of the Provident Dispensary in that town with a handsome marble clock in appreciation of professional services rendered to them.

SURGICAL AID SOCIETY.—The first meeting of the Brighton and Hove Branch of this Society was held on the 21st inst., in the banqueting room of the Royal Pavilion. The Mayor of Brighton (Dr. Ewart) presided and explained the objects contemplated by the formation of the branch as well as the work of the parent society.

WILTS COUNTY ASYLUM.—The Wilts County Council has decided to purchase upwards of thirty-three acres of land adjoining the County Asylum for providing additional airing ground for the patients and for sewerage purposes. Application will be made to the Local Government Board for sanction to borrow the necessary sum for the proposed outlay.

FOOTBALL CASUALTIES.—During a match, on the 12th inst., at Sandhurst village a player sustained a compound fracture of the leg and also severely injured his foot. He was admitted to the hospital at the Royal Military College.—On the 16th inst., in a match between King's School, Chester, and Grove Park School, Wrexham, a player of the former school fractured his left leg.

MEDICAL MAGISTRATES.—Dr. John Brown of Burnley, Dr. Joseph Ewart and Mr. Bernard Roth of Brighton, Drs. George H. Russell and S. Woodcock of Manchester, and Dr. Arthur Garnons Lawrence of Chepstow have been added to the Commission of the Peace for the boroughs of Burnley and Brighton, the city of Manchester, and the county of Monmouth respectively.

GREAT NORTHERN CENTRAL HOSPITAL.—It is intended to hold a festival dinner early in next spring in aid of the funds for the completion of the buildings, and H.R.H. the Duke of York has consented to preside on the occasion. The cost of the extensions, with furniture and fittings, will be at least £27,000, towards which sum only £8000 have been promised or received.

DOMESTIC HYGIENE.—A series of eight lectures on various subjects connected with domestic hygiene are being undertaken by the Halesowen and District Technical Instruction Committee, and will no doubt be useful in promoting public interest in matters connected with the health and happiness of home life. The lectures will deal with such points as the management of infants, the means of recognising poisons, what articles of diet should be chosen and what avoided, and so forth. The lecturers are Dr. T. B. Young, and Mr. H. C. Darby, and the series of discourses will extend from Nov. 16th to Dec. 8th.

THE LONDON HORSE.—At St. James's Hall, on Monday last, a meeting was held for the purpose of considering what means could be taken to improve the condition of the London horse and furthering the unity and wellbeing of all who in any way were connected with horses. Suggestions were made with reference to the establishment of convalescent homes for horses and to the improvement of their food. The question as to whether horse owners and men should be placed under the authority of the County Council was also discussed. A committee has been formed, and the meetings will be continued during the next few months.

BOOKS ETC. RECEIVED.

BENTLEY, RICHARD, & SON, London.
Egypt To-day: The First to the Third Khedive. By W. Fraser Rae. 1892. pp. 331.

BOYLE, ROBT., & SON, London and Glasgow.
A Sanitary Crusade through the East and Australia. Reprinted from the "Building News," Sept., 1892. pp. 44.

BEMROSE & SONS, Limited, Old Bailey, London, and Derby.
The Official Report of the Church Congress, held at Folkestone, Oct., 1892. Edited by the Rev. C. Dunkley. 1892. pp. 645.

CHURCHILL, J. & A., New Burlington-street, London.
A Short Manual of Orthopædy. By H. Bigg, F.R.C.S. Edin. Part I. Deformities and Deficiencies of the Head and Neck. 1892. pp. 73.

DAVIS, F. A., CO., Philadelphia and London.
Tuberculosis of Bones and Joints. By N. Senn, M.D., Ph.D., Chicago. 1892. pp. 504.

HIRSCHWALD, AUGUST, Berlin.
Das Gesetz der Transformation der Knochen. Von Dr. J. Wolff. 1892. pp. 152.

KEGAN PAUL, TRENCH, TRÜBNER & CO., Charing-cross-road, London.
Man and the Glacial Period. By G. Fredk. Wright, D.D., LL.D., F.G.S.A. With an Appendix on Tertiary Man, by Professor H. W. Haynes. Illustrated. 1892. pp. 385. Price 5s.

LEWIS, H. K., Gower-street, London.
Text-book of Ophthalmology. By Dr. E. Fuchs. Translated from the Second German Edition, by A. Duane, M.D. Illustrated. 1892. pp. 788.
Notes on the Clinical Examination of the Blood and Excreta. By S. Coupland, M.D., F.R.C.P. Third Edition. 1892. pp. 63. Price 1s. 6d.

LONGMANS, GREEN & CO., London.
The Diseases of Children, Medical and Surgical. By H. Ashby, M.D. Lond., L.R.C.P., and G. A. Wright, M.B. Oxon., F.R.C.S. Eng. Second Edition. 1892. pp. 757. Price 24s.

LIPPINCOTT, J. B., COMPY., London and Philadelphia.
Diseases of the Kidneys and Bladder. A Text-book for Students of Medicine. By W. F. McNutt, M.D., M.R.C.S., L.R.C.P. Edin. 1893. pp. 242.
Mother and Child. Part I.: Mother. By E. P. Davis, A.M., M.D. Part II.: Child. By John M. Keating, M.D., LL.D. 1893. pp. 472.

MASSON, G., 120, Boulevard Saint-Germain, Paris.
Manuel Technique de Massage. Par le Dr. J. Brousses. Avec Figures dans le Texte. pp. 131.

OFFICE OF THE CHEMIST AND DRUGGIST, Cannon-street, London.
The Pharmacy and Poison Laws of the United Kingdom. With a Brief Account of the Pharmacy Laws in force in Australasia, Canada, and Cape Colony. pp. 220. Price 2s. 6d.

OLIVER & BOYD, Edinburgh.
The Transactions of the Edinburgh Obstetrical Society, Vol. XVII. Session 1891—92. pp. 297.

PUTNAM'S, G. P., SONS, New York and London.
The Diagnosis of Diseases of the Nervous System. By C. A. Herter, M.D. 1892. pp. 628.

SAXON & CO., Bouverie-street, London.
Sultan to Sultan. Adventures among the Masai and other Tribes of East Africa. By M. French-Sheldon. 1892. pp. 435.

STOCK, ELLIOT, Paternoster-row, London.
The Dawn of the English Reformation; its Friends and Foes. By H. Worsley, M.A. Cheaper Edition. 1892. pp. 380.

SWAN SONNENSCHEIN & CO., London and New York.
Text-book of the Embryology of Man and Mammals. By Dr. O. Hertwig. Translated from the Third German Edition by E. L. Mark, Ph.D. With Figures and Plates. 1892. pp. 670.

THE NEW SYDENHAM SOCIETY, London.
A Treatise on Gynæcology, Clinical and Operative. By S. Pozzi, M.D. Vol. I. 1892. pp. 426.
The New Sydenham Society's Lexicon of Medicine and the Allied Sciences. By H. Power, M.B., and L. W. Sedgwick, M.D. Part XIX. Nec—Olf. 1892.

UNWIN, T. FISHER, Paternoster-square, London.
The Nationalisation of Health. By Havelock Ellis. 1892. pp. 244. Price 3s. 6d.

Easy Lessons on Alcohol and its Effects on Body and Mind; by W. Taylor; illustrated; Part I. (Church of England Temperance Society, 4, Sanctuary, Westminster); price 6d.—Umsturz der Harvey'schen Lehre vom Blutkreislaufe und Erklärung der Natürlichen Blutbewegung; von Dr. F. Jezek (Peter Hobbing, Leipzig).—The Practitioner, November, 1892 (Macmillan & Co., London); price 1s. 6d.—Our Sick, and How to take Care of Them; by Florence Stacpoole, 1892 (Cassell and Co., London); price 1s.—On the alleged Connexion of Vaccination with Leprosy; by Phineas S. Abraham, M.A., M.D., B.Sc., F.R.C.S. Irel. (Reprint) (Eyre & Spottiswoode, London, 1892).—Gordon and Gotch's Australasian Newspaper Directory; third edition, 1892 (Gordon & Gotch, General Commission Agents, St. Bride-street, London).—The Professional Pocket Book, or Daily and Hourly Engagement Diary, for 1893 (Rudall, Carte & Co., Berners-street, London, W.)—Sections-Tecthnik; von Rudolf Virchow; 4 Auflage; 1893 (August Hirschwald, Berlin).—Advice to Women on the care of the Health before, during, and after Confinement; by Florence Stacpoole (Cassell & Co., London, 1892); price 1s.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

ATKEY, P. J., L.R.C.P., M.R.C.S., has been reappointed House Surgeon to St. Thomas's Hospital.

ATKINSON, J., M.B., C.M. Edin., has been appointed Assistant Resident Medical Officer to the North-West London Hospital.

BANKS, A., L.R.C.P., M.R.C.S., has been reappointed House Surgeon to St. Thomas's Hospital.

BURDEN, H., L.R.C.P., M.R.C.S., has been reappointed House Surgeon to St. Thomas's Hospital.

BURY, R. F., M.R.C.S., L.R.C.P., has been appointed House Surgeon to St. George's Hospital.

CHARLTON, F. J., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the Fourth Sanitary District of the Wimborne Union.

COOPER, H. J., M.A., M.B., B.C. Cantab., L.R.C.P., M.R.C.S., has been appointed Clinical Assistant for Diseases of the Skin to St. Thomas's Hospital.

DALZELL, A., L.R.C.P., M.R.C.S., has been reappointed Non-resident House Physician to St. Thomas's Hospital.

DONALD, JAS., M.R.C.S., has been reappointed Medical Officer Health for Ham.

DORMAN, M. R. P., M.A., M.B., B.C. Cantab, L.R.C.P., M.R.C.S., has been reappointed Clinical Assistant for Diseases of the Throat to St. Thomas's Hospital.

ELLIS, R. K., M.B., B.Ch. Oxon., has been appointed Junior Obstetric House Physician to St Thomas's Hospital.

FISHER, J., B.A., M.B, B.C. Cantab., has been reappointed Senior Ophthalmic House Surgeon to St. Thomas's Hospital.

FISHER, J. H., L.R.C.P., M.R.C.S., has been reappointed House Surgeon to St. Thomas's Hospital.

FREDERICK, H. J., L.S.A., has been reappointed Clinical Assistant for Diseases of the Ear to St. Thomas's Hospital.

GARROD, A. E., M.A., M.D., has been appointed an Assistant Physician to the Hospital for Sick Children, Great Ormond-street.

GUNN, DONALD, F.R.C.S., has been appointed Ophthalmic Surgeon to the Hospital for Sick Children, Great Ormond-street.

HAINWORTH, E. M., B.Sc. Lond., L.R.C.P., M.R.C.S., has been appointed Non-resident House Physician to St. Thomas's Hospital.

HALL, ALFRED, M.R.C.S., has been reappointed Medical Officer for the Butterton and Grindon Sanitary District of the Leek Union.

HAMPER, C. NORMAN, M.B., C.M. Edin., has been appointed Resident Medical Officer to the North-West London Hospital, vice Chas. D. Sutherland.

HARDWICKE, E. W., M.B., B.C. Camb., has been appointed Medical Officer for the No. 2 Sanitary District of the Stourbridge Union.

HICKS, T. W., L.R.C.P., M.R.C.S., has been appointed Clinical Assistant for Diseases of the Throat to St. Thomas's Hospital.

HOPKINS, G. HERBERT, L.R.C.P. Lond., M.R.C.S., has been appointed Senior Surgeon to the Swansea General Hospital, vice Thomas, resigned.

HUGHES, E. LUCAS, M.R.C.S., L.R.C.P. Lond., has been appointed Physician's and Surgeon's Assistant to the Out-patients at University College Hospital.

ISAACS, E. P., L.R.C.P., M.R.C.S., has been appointed Junior Ophthalmic House Surgeon to St. Thomas's Hospital.

JAFFÉ, C. S., L.R.C.P., M.R.C.S., has been appointed Resident House Physician to St Thomas's Hospital.

KNOWLES, E., M.D., C.M. Aberd., has been appointed Public Vaccinator for the Birkenhead District of the Birkenhead Union.

NEVILLE, THOMAS, M.D., M.Ch. Irel., has been appointed Divisional Surgeon to the Police attached to the Gerald-road Police-station in the B. Division, S. W.

PRICE, A. E., L.R.C.P., M.R.C.S., has been reappointed Clinical Assistant for Diseases of the Ear to St. Thomas's Hospital.

PROSSER, FRANK, M.B., C.M. Glasg., has been appointed Medical Officer of Health for the Rainford Urban Sanitary District of the Prescot Union, vice Muedock, resigned.

PURVIS, W. P., B.Sc. Lond., L.R.C.P., M.R.C.S., has been appointed Assistant House Surgeon to St. Thomas's Hospital.

RICHARDSON, R. T., M.R.C.S., has been appointed Medical Officer for the North Bradley and Southwick Sanitary District of the Westbury Union, vice Wise, resigned.

SINCLAIR, WM., M.B., C.M. Aberd., has been appointed Assistant Surgeon to the Royal Infirmary, Aberdeen.

STURGE, MARY D., M.B. Lond., has been appointed Assistant Resident Medical Officer at the Fever Hospital, Stamford-hill.

THOMAS, E. C., M.B., C.M. Edin., has been appointed Medical Officer for the Llanbyther Sanitary District of the Lampeter Union, vice Griffiths.

THOMSON, A. D. R., L.R.C.P., L.R.C.S. Edin., has been appointed Medical Officer for Inveresk.

WAINWRIGHT, W. L., L.R.C.P., M.R.C.S., has been appointed Assistant House Surgeon to St. Thomas's Hospital.

WALLACE, C. S., L.R.C.P., M.R.C.S., has been appointed Senior Obstetric House Physician to St. Thomas's Hospital.

WATKINS-PITCHFORD, W., L.R.C.P. M.R.C.S., has been reappointed Resident House Physician to St. Thomas's Hospital.

WELLS, E. N. K., M.B., C.M. Edin., has been appointed Medical Officer for the No. 3 Sanitary District of the Romsey Union.

WEST, J. T., M.B., C.M. Aberd., has been appointed Non-Resident House Physician and Surgeon to the Hospital for Sick Children, Aberdeen.

WILLIAMSON, J. HENRY, M.R.C.S., L.R.C.P. Lond., has been appointed House Surgeon to the Clinical Hospital for Diseases of Women and Children, Manchester, vice Cooke, resigned.

WOODCOCK, A. H., L.R.C.P., M.R.C.S., has been appointed Clinical Assistant for Diseases of the Skin to St. Thomas's Hospital.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement (see Index.)

BIRMINGHAM AND MIDLAND EYE HOSPITAL.—Assistant House Surgeon. Salary £50 per annum, with apartments and board.

BOOTLE BOROUGH HOSPITAL.—Assistant House Surgeon and Dispenser. Salary £40 per annum, with board, lodging, and washing.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria-park, E.—House Physician for six months. Board and residence, and allowance for washing provided. (Applications to the Secretary, 24, Finsbury-circus, E.C.)

FARRINGDON GENERAL DISPENSARY, Bartlett's-buildings, Holborn-circus, E.C.—Resident Medical Officer. Salary £100 per annum, with apartments and attendance.

FISHERTON ASYLUM.—Clinical Assistant for six months. Board, lodging and washing provided. Apply to Dr. Finch, Fisherton Asylum, Salisbury.

GENERAL HOSPITAL FOR SICK CHILDREN, Pendlebury, Manchester.—Junior Resident Medical Officer for one year. Salary £80 per annum, with board and lodging.

HUDDERSFIELD INFIRMARY.—Senior House Surgeon. Salary £80 per annum, advancing £10 a year to £100, with board, lodging and washing.

LONDON COUNTY COUNCIL, MAYFORD INDUSTRIAL SCHOOL, WOKING, SURREY.—Visiting Medical Officer. Payment will be by fees, and further particulars obtained from Mr. Kidpath, the superintendent of the school. Applications to the Clerk of the Council, Spring-gardens, W.C.

NOBLE'S ISLE OF MAN AND GENERAL HOSPITAL AND DISPENSARY, Douglas, Isle of Man.—Resident House Surgeon; unmarried. Salary £100 per year, with apartments, gas, coal and laundry free.

NORTH-EASTERN HOSPITAL FOR CHILDREN, Hackney-road, N.E.—Junior House Surgeon for six months. Salary at the rate of £60 per annum.

NORTHUMBERLAND COUNTY LUNATIC ASYLUM.—Assistant Medical Officer in the asylum, unmarried. Salary £120 per annum, increasing £10 a year up to £150, with furnished apartments, board and lodging.

OWEN'S COLLEGE, Manchester.—Junior Demonstratorship in Physiology and Histology. Annual salary, £100.

PARISH OF PADDINGTON.—Medical Officer for the South District. Salary £75 per annum, exclusive of such extra medical fees as are allowed in certain cases.

PAROCHIAL BOARD OF EDINBURGH.—Resident Medical Officer for the Poor-house, Craiglockhart. Salary £80, with board and lodging.

SAMARITAN HOSPITAL FOR DISEASES OF WOMEN, Lisburn-road, Belfast. Two Honorary Attending Physicians, who shall be specialists.

MIDDLESEX HOSPITAL, W.—Clinical Assistant to the out-patients' department for Diseases of the Skin, for five months.

Births, Marriages and Deaths.

BIRTHS.

FAWCETT.—On Nov. 18th, at Marmora House, Honor Oak, the wife of W. Herbert Fawcett, M.D., of a daughter.

FLETCHER.—On Nov. 19th, at Harley-street, W., the wife of H. Morley Fletcher, M.A., M.B., of a daughter.

HENDLEY.—On Nov. 16th, at Peshawar, India, the wife of Surgeon-Captain Harold Hendley, I.M.S., Civil Surgeon, Peshawar, of a daughter, stillborn.

ROBINSON.—On Nov. 21st, at Lupus-street, St. George's-square, the wife of Surgeon-Major G. Somerville Robinson, Scots Guards, of a son.

SYMES.—On Nov. 21st, at Claremont House, Saltram-crescent, Maida-hill, the wife of William Legge Symes, M.R.C.S., of a daughter.

TWEEDY.—On Nov. 17th, at 100, Harley-street, W., the wife of John Tweedy, of a daughter.

WAKEFIELD.—On Nov. 14th, at The Beacon, Guildford, the wife of Horace Wakefield, M.R.C.S.E., L.R.C.P., of a daughter.

MARRIAGES.

BULLEID—FAIRLES.—On Nov. 23rd, at St. James's, Spanish-place, by the Rev. Canon Barry, Edgar George Bulleid, L.R.C.P. &c., of 10, Southwick-street, Hyde-park, only son of George Bulleid, M.R.C.S. &c., of 65, Edgware-road, Hyde-park, to Mary Kent Fairles, youngest daughter of the late William Watson Fairles, Esq., of Field House, South Shields. New Zealand papers please copy.

PRANKERD—BULL.—On Nov. 17th, at St. Marks, Southampton, by the Rev. E. L. Franklin, M.A., Vicar, Herbert P. Prankerd, M.B. Edin., M.R.C.S. Eng., younger son of Peter Dowding Prankerd, Esq., of Stoke Bishop, near Bristol, to Florence J., eldest daughter of William Bull, Esq., of Glenville, Banister-park, Southampton.

ROBERTSON—DOXFORD.—On Nov. 19th, at Christchurch, Sunderland, by the Rev. Canon Scott-Moncrieff, Andrew Robertson, M.A., M.B., and C.M., son of the late Rev. Gilbert Robertson, M.A., of Newcastle-on-Tyne, to Margaret Emily, eldest daughter of Alfred Doxford, Esq., Thornhill-gardens, Sunderland. No cards.

WHITAKER—GARNEYS.—On Nov. 19th, at St. Mary's Church, Bungay, by the Rev. T. K. Weatherhead, Vicar, George Herbert Whitaker, M.R.C.S. Eng., L.S.A., of Avona House, Bungay, third son of Joseph Whitaker, F.S.A., of White Lodge, Enfield, Middlesex, to Gertrude, third daughter of the late Thomas Garneys, M.R.C.S., L.S.A., of Trinity-street House, Bungay.

DEATHS.

ARNISON.—On Nov. 17th, at Stanhope, suddenly, Charles Annison, J.P., Physician and Surgeon, aged 83.

BARRETT.—On Nov. 17th, at King's Lynn, Joseph William Barrett, M.R.C.S., aged 51.

COOKE.—On Nov. 21st, at Fitzroy-square, London, Robert Cooke, Surgeon, of Newport, Mon.

DICKINSON.—On Nov. 20th, at his residence, Christian-street, Workington, Cumberland, William Lindow Dickinson, L.R.C.P. Lond., M.R.C.S.

GILPIN.—On Nov. 16th, at his residence, Wood-street, Stratford-on-Avon, Frank Gilpin, M.R.C.S., aged 27.

MOON.—On Nov. 15th, Henry Moon, M.R.C.S., of Egham, formerly Dental Surgeon to Guy's Hospital, London, aged 49.

RHODES.—On Nov. 22nd, at 1, Queen-street South, Huddersfield, aged 69, George Winter Rhodes, M.R.C.S., L.S.A.

WHITING.—On Nov. 21st, at Haslemere, Surrey, suddenly, Henry Whiting, M.R.C.S., L.S.A., aged 63.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages and Deaths.

Medical Diary for the ensuing Week.

Monday, November 28.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.; Fridays and Saturdays, at the same hour.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; and on Tuesday, Wednesday, Friday, and Saturday at the same hour.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, daily at 10 A.M.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M.; and each day at the same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2 P.M.; Thursday, 2.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M.; and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and each day in the week at the same hour.

UNIVERSITY COLLEGE HOSPITAL.—Ear and Throat Department, 9 A.M.; Thursday, 9 A.M. Eye Department, 2.

LONDON POST-GRADUATE COURSE.—Royal London Ophthalmic Hospital: 1 P.M., Mr. A. Stanford Morton: Ocular Injuries.—101, Gt. Russell-st.: 3 P.M., Dr. Galloway: Cardio-vascular System.—Parkes Museum (Margaret-st., W.): 4 P.M., Dr. Louis C. Parkes: Foods and Dietaries.

CENTRAL LONDON THROAT AND EAR HOSPITAL (Gray's Inn-road).—5 P.M. Mr. Lennox Browne: Rhinitis, Acute, Purulent, Croupous, Hypertrophic, Hyperæsthetic (Hay Fever and Hay Asthma), Atrophic; Deformities and Deviations of the Nasal Septum.

THROAT HOSPITAL (Golden-sq.).—5 P.M. Dr. James W. Bond: Non-malignant Laryngeal Growths.

MEDICAL SOCIETY OF LONDON.—8.30 P.M. Dr W. Collier (Oxford): Athletic Exercises as a Cause of Disease of the Heart and Aorta.—Mr. Herbert Allingham: Hæmorrhoids—the Importance of recognising the Varieties as determining the Selection of Treatment.

Tuesday, November 29.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2 P.M.; Saturday, 2 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Skin Department, 1.45; Saturday, 9.15.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday, 2.30 P.M. Skin Department, Monday and Thursday, 9.30 A.M. Throat Department, Tuesdays and Fridays, 1.30 P.M. Electro-therapeutics, same day, 2 P.M.

LONDON POST-GRADUATE COURSE.—Hospital for Skin Diseases, Blackfriars: 4 P.M., Dr. Payne: Pemphigus and Allied Diseases.—Bethlem Hospital: 2 P.M., Dr. H. Corner: Moral Insanity.—101, Gt. Russell-street: 3 P.M., Dr. Amand Routh: Post-partum Hæmorrhage.

LONDON SKIN HOSPITAL (40, Fitzroy-sq., W.).—3 P.M. Mr. James Startin: The Surgical Treatment of Acne, Lupus, and Rodent Ulcers.

Wednesday, November 30.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1.30 P.M.; Saturdays, 2 P.M. Obstetrical Operations, Thursdays, 2 P.M.

CHARING-CROSS HOSPITAL.—Operations, 3 P.M., and on Thursday and Friday at the same hour.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday and Saturday, same hour.

ST. PETER'S HOSPITAL, COVENT-GARDEN.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 1.30 P.M. Dental Department, 9.30. Eye Department, 2.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.—Operations, 9.30 A.M. Surgical Visits on Wednesday and Saturday at 9.15 A.M.

LONDON POST-GRADUATE COURSE.—Hospital for Consumption, Brompton: 4 P.M., Dr. C. Y. Biss: Demonstration of Cases of Special Interest. Royal London Opthalmic Hospital: 3 P.M., Mr. A. Quarry Silcock: Progressive Myopia.

THROAT HOSPITAL (Golden-sq.).—5 P.M. Dr. R. Norris Wolfenden: Cancer of Larynx.

Thursday, December 1.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. Surgical Consultations, Wednesday, 1.30 P.M. Ophthalmic Operations, Friday, 1.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M. Ear and Throat Department, 9 A.M. Eye Department, 2.

LONDON POST-GRADUATE COURSE.—Hospital for Sick Children, Great Ormond-street: 4 P.M., Mr. F. W. Wagstaffe: Pathological Demonstration on Diseases of Bone.—National Hospital for the Paralysed and Epileptic: 2 P.M., Dr. Taylor: Pathological Specimens.—London Throat Hospital, Great Portland-st.: 8 P.M., Mr. George Stoker: Impaired Movements of the Vocal Chords.—Central London Sick Asylum, Cleveland-st., W.: 5.30 P.M., Mr. John Hopkins: Cases in the Wards.

CENTRAL LONDON THROAT AND EAR HOSPITAL (Gray's Inn-road).—Dr. Dundas Grant: The Examination of the Organs of Hearing.

HARVEIAN SOCIETY.—8.30 P.M. Mr. Field: The Pathology and Treatment of Suppurative Diseases of the Ear. (First Harveian Lecture.)

Friday, December 2.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Eye Department, 2.

LONDON POST-GRADUATE COURSE.—Hospital for Consumption, Brompton: 4 P.M., Dr. C. Y. Biss: Demonstration of Cases of Special Interest. Bacteriological Laboratory, King's College, 11 A.M. to 1 P.M., Prof. Crookshank: Typhoid Fever, Diphtheria, Rabies and Tetanus (Sections and Cultivations).

LONDON SKIN HOSPITAL (40, Fitzroy-sq., W.).—3 P.M. Dr. Sanctuary: Eczema, its Etiology, Morbid Anatomy and Varieties.

WEST KENT MEDICO-CHIRURGICAL SOCIETY (Royal Kent Dispensary).—8 P.M. Clinical Evening.

Saturday, December 3.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; and Skin Department, 9.15 A.M.

LONDON POST-GRADUATE COURSE.—Bethlem Hospital: 11 A.M., Dr. Percy Smith: Lunacy Law.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, Nov. 24th, 1892.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo	Maximum Temp. Shade.	Min. Temp	Rainfall.	Remarks at 8.30 A.M.
Nov. 18	29·96	S.W.	42	41	48	44	41	..	Overcast
,, 19	29·72	S.E.	43	42	65	50	38	..	Foggy
,, 20	29·93	N.W.	46	44	50	47	42	·10	Overcast
,, 21	30·31	N.E.	48	43	49	47	36	..	Foggy
,, 22	30·36	S.E.	45	44	..	47	38	..	Overcast
,, 23	30·31	E.	45	44	..	47	42	..	Overcast
,, 24	30·20	S.W.	41	40	..	42	40	·03	Overcast

Notes, Short Comments & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editors."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

EXPERIMENTS ON LIVING ANIMALS.

WE understand that the address delivered by Dr. Wilks on this subject before the Church Congress has been published in pamphlet form, price 3*d.*, and may be obtained from the publisher, Mr. Kolckmann, 2, Langham-place, W.

Mr. S. B. G. McKinney (Nunhead).—What does our correspondent mean when he asks for a scientific division of the body? No reply can be given to such a wide question. An anatomist would reply to it in one form, a physiologist in another, an histologist in a third—all with equal precision.

"A CURIOUS INCIDENT."

To the Editors of THE LANCET.

SIRS,—Your issue of Oct. 15th, 1892, having only just reached me, I hasten to furnish the information asked for by Mr. J. Elliot Square under the above heading at page 922. I presume he is referring to the case of Lord A——, who was under the care of my old friend, Dr. Mint. I regret to say he ultimately died in great agony after a protracted illness of one month, during the course of which he got rid of one shilling, two sixpences, a threepenny-bit and three bright pennies, none of which were known to have been swallowed. The half-crown was never recovered, as the friends would not hear of a post-mortem examination—a matter for regret, as there is no knowing how many more coins might not have come to light in this extraordinary and unique case of what was most probably a coin-swallowing mania.

I am, Sirs, yours truly,

India, Nov. 4th, 1892. A. STEWART.

TOMMY'S DOCTOR.

(With apologies to Rudyard Kipling, whose experience has doubtless taught him that if it is impossible to make a soldier out of a doctor, it is very unlikely that one could ever become a poet.)

I went up for a service club, and thought it rather queer
That the fighting (?) members plainly said, "We want no doctors here."
The beardless subs within the bar they giggled like to die;
I thought of other times and scenes, and to myself said I:
"It's Doctor this and Doctor that, and 'Doctor go away';
But you sometimes sing a different tune when we're serving far away—
When we're serving far away, my boys, all serving far away,
It's quite a different story when we're serving far away."

I went on active service, and came home with a V.C.
They gave all other officers rank, but they had none for me;
They called me a "non-combatant," "camp-follower," a "thing";
But when we were out fighting, the doctor was a king.
For it's Doctor this and Doctor that, and "Doctor wait outside";
But it's Doctor "anything you want" when the trooper's on the tide—
When the trooper's on the tide, my boys, the troopship's on the tide,
But it's Doctor anything you want when the transport's on the tide.

Now, though at home you jeer and scoff at soldier doctor men,
The army knows what we have done for officers and men;
And it would be more manly to own it to our face,
That you *know* the army doctor *your* cloth does not disgrace.
For it's Doctor this and Doctor that, and you treat him like a brute;
But it's "saviour of his comrades" when the guns begin to shoot.
It's Doctor here and Doctor there, and "Doctor, bind my wound,"
Though the doctor like a soldier is dying on the ground

INKERMAN.

Dr. Whitton.—We cannot go into the matter referred to, which has been the subject of a judicial decision.

WARNING TO PRINCIPALS.

To the Editors of THE LANCET.

SIRS,—Some time ago I advertised in THE LANCET for an unqualified assistant, and selected one with excellent references, particularly as to sobriety. He turned out anything but satisfactory—in short, drank heavily. On enquiry I discovered his referee was his brother-in-law. After leaving me, and before his departure to a good post in the North of England, he was on a drunken "bout," visiting the lowest inns in the place. Lately I had to advertise again for an assistant, and amongst the selected was one who stated he had good references. I wrote for the names of his employers, and, on applying to the only one he gave me, I received by telegram a satisfactory reply. Meanwhile, not being satisfied with one testimonial, I requested him to furnish me with the address of a former principal with whom I might communicate. I then received from him a letter of recommendation purporting to be a copy of one given to him. I enclosed this copy to the doctor supposed to have written the original, and asked if it were a true copy. His reply was that it must be a forgery, as he had never given such a testimonial, and had anything but a high opinion of the assistant in question. I now believe the telegram sent in the first instance to have been also fictitious.

I am, Sirs, yours faithfully,
November, 1892. PRINCIPAL.

"A FORM OF DANDRIFF."

To the Editors of THE LANCET.

SIRS,—"Lux" might find the following method of treatment useful in his obstinate case of dandriff. Let the patient twice daily wash well into the roots of the hair a lotion composed of from two to five grains of perchloride of mercury in a saturated alcoholic solution of boracic acid. When this has been dried let her rub in an ointment of sulphur and carbolic acid—say twenty grains of the first and half a drachm of the other to the ounce, using lanoline or lard, or a mixture of both, as an excipient. For cleansing purposes she might use superfatted potash soap. The case is probably one of seborrhœa or seborrhœic eczema of the scalp, and it may possibly have been communicated in the way suggested. The treatment I have indicated I find pretty successful here. I should be glad to hear how "Lux's" case gets on.

I am, Sirs, yours faithfully,
Glasgow, Nov. 22nd, 1892. DAVID COUPER.

To the Editors of THE LANCET.

SIRS,—Replying to the inquiry of "Lux," I beg to be allowed to say that I have had good results in obstinate scurf of the scalp by washing the head in warm water containing about three drachms each of sod. bi-. and liq. picis carb. to the quart, and afterwards applying ichthyol ointment. Tar soap might be a useful addition.

I am, Sirs, yours truly,
Nov. 23rd, 1892. E. CURTIN.

To the Editors of THE LANCET.

SIRS,—In reply to "Lux," I would suggest his trying a weak sulphur ointment. I have used it of the strength of two drachms to the ounce of vaseline in a most obstinate case of dandriff with complete success.

I am, Sirs, yours faithfully,
Herne Bay, Nov. 23rd, 1892. E. C. FENOULHET.

"HISTORY OF QUACKS AND QUACKERY."

Dr. J. Harold Bailey (Birkenhead) writes:—"Your correspondent might consult 'Sir Thomas Browne's Works, including his Life and Correspondence' (London: William Pickering, 1836), vol. i., page 244:—

'*Sir Thomas Browne to his son Edward.*

'May 28th, 1679.

'..... I sawe a woman of 80 yeares, while the cataract was couched in both eyes, and shee had a dimme sight for a yeare after, till shee dyed; it was done by Vanderias. The ignorance of chirurgeons, as to chirurgecall operations, creates so many mountebank and stage quacksalvers. Heere (Norwich, J. H. B.) hath been a mountebank these 2 months, who cutts for wrye necks, coucheth cataracts, cures hare lipps &c., wherin no chirurgeon of this place being versed, hee hath had a great deal of employment to the shame of our chirurgeons.—Your loving father,

'THOMAS BROWNE.

'These for Dr. Edward Browne, in Salisburie Court, next the Golden Balls, London.'

In 'The Starling,' a novel by the Rev. Normal Macleod, there is an account of the doings of a quack in a country district of Scotland."

Mr. O. B. Shelswell.—The institution referred to is probably the National Society for the Employment of Epileptics. It is situated at Godalming, and its hon. secretary is Miss Burdon-Sanderson, Branksome, Greenhill-road, N.W.

Mr. H. S. Reynolds.—The reply to the question depends on the nature of the actual contract, but we think it would be unreasonable to refuse our correspondent a perusal of the books.

"OFFICIAL" OR "OFFICINAL"?

To the Editors of THE LANCET.

SIRS,—The terms "official" and "officinal" are frequently used as synonymous by authors of works on materia medica and kindred subjects. The examiners for the triple qualification at Edinburgh fall into the same error; so it may be as well to point out that there is a wide difference between the words. "Official" (*officium*—an office) means issued or sanctioned by authority; "officinal" (*officina*—a shop) means kept in a shop. Blue pill is official; liver pills are officinal.

I am, Sirs, yours faithfully,
Mount-place, E., Nov. 19th, 1892. ARTHUR H. DOBSON.

EMPLOYMENT OF COCAINE.

To the Editors of THE LANCET.

SIRS,—Can any of your readers who have used cocaine in minor surgery give me a hint as to the dose and best method of application in a case of fissure of the anus? I should also like to know if it is dangerous to use in the case of purulent ophthalmia of infants or in conjunctivitis of children to allay spasm in the use of astringent lotions.

I am, Sirs, yours truly,
Nov 22nd, 1892. YOUNG PRACTITIONER.

CHLOROFORM INHALATION IN PHTHISIS PULMONALIS.

To the Editors of THE LANCET.

SIRS,—I am anxious to know if any of your numerous readers have observed beneficial effects follow the inhalation of chloroform for operations in phthisical cases.

I am, Sirs, yours faithfully,
St. Leonards-on-Sea, Nov. 18th, 1892. SAMUEL LEE, M.D.

ERRATUM.—In our article on "Municipal Honours and Medical Men" (page 1190) an error occurs in connexion with the name of Mr. George Wright Hutchinson, who should have been described as M.B. & C.M. Aber. (not M.D.), whilst the clerical office spoken of as having been formerly held by him was not held by him, but by his father.

COMMUNICATIONS not noticed in our present issue will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—

A.—Dr. F. P. Atkinson, Surbiton; Mr. J. Anderson, Ancoats; Mr. Archer, Alnwick; Mr. H. F. Aveling, London; Messrs. Allen and Hanburys, London; Messrs. R. Anderson and Co., London; A., London; Africanus; Alpha, Lee; Anderson's Medical College, Glasgow; Alpha.

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N.—Dr. Frederick Needham, Barnwood House Hospital; National Provident Institution, London.

O.—Obstetrician, London.

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X.—X. Y. Z., London.

Y.—Yost Typewriter Co., London.

Z.—Zetland, London.

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